CMT-M90DVD

SERVICE MANUAL

Ver 1.1 2002.11

US Model
Canadian Model
AEP Model
UK Model
E Model
Australian Model
Chinese Model

- CMT-M90DVD is composed of following models.
  As service manuals are issued for each component model, please refer to them.

COMPONENT MODEL NAME

	CMT-M90DVD
DVD DECK RECEIVER	HCD-M90
SPEAKER SYSTEM	SS-CM90

SPECIFICATIONS

Power requirements
North American model: 120 V AC, 60 Hz
European model: 230 V AC, 50/60 Hz
Australian model: 230 V AC, 50/60 Hz
Chinese model: 220 V AC, 50/60 Hz
Other models: 110 – 120 V or 220 – 240 V AC, 50/60 Hz Adjustable with voltage selector

Power consumption
European model: see the name plate 0.3 watts (at the Power Saving mode)
Other models: see the name plate

Dimensions (w/h/d) incl. projecting parts and controls
Amplifier/Tuner/Tape/DVD section: Approx. 159 × 217 × 335 mm
Speaker: Approx. 140 × 217 × 226 mm

Mass
Amplifier/Tuner/Tape/DVD section: Approx. 5.7 kg
Speakers: Approx. 2.4 kg net per speaker

Supplied accessories: Remote (1), R6 (size AA) batteries (2), AM loop antenna (1), FM lead antenna (1), Video cable (1)

Design and specifications are subject to change without notice.

ACCESSORIES

Part No.	Description	Remark
1-477-241-11	REMOTE COMMANDER (RM-SM90)	
1-501-594-43	ANTENNA (FM) (CH)	
1-501-659-62	ANTENNA (FM) (US, CND, SP)	
⚠1-569-008-12	ADAPTOR, CONVERSION 2P (SP)	
1-769-108-11	CORD, CONNECTION (VIDEO CABLE)	
1-754-060-13	ANTENNA (FM) (AEP, UK, AUS)	
1-754-094-12	ANTENNA, LOOP (AM) (CH)	
1-754-149-11	ANTENNA, LOOP (AM) (EXCEPT CH)	
4-232-032-01	COVER, BATTERY (for RM-SM90)	
4-239-826-12	MANUAL, INSTRUCTION (ENGLISH) (EXCEPT CH)	
4-239-826-22	MANUAL, INSTRUCTION (FRENCH, SPANISH)	(AEP, SP)
4-239-826-32	MANUAL, INSTRUCTION (FRENCH) (US, CND)	
4-239-826-42	MANUAL, INSTRUCTION (GERMAN, DUTCH, ITALIAN) (AEP)	
4-239-826-52	MANUAL, INSTRUCTION (SWEDISH, POLISH) (AEP)	
4-239-826-62	MANUAL, INSTRUCTION (TRADITIONAL CHINESE)	(SP)
4-239-828-11	MANUAL, INSTRUCTION (GREEK) (AEP)	
4-239-828-21	MANUAL, INSTRUCTION (HUNGARIAN, CZECH)	(AEP)
4-239-828-31	MANUAL, INSTRUCTION (TURKISH) (AEP)	
4-239-828-41	MANUAL, INSTRUCTION (SLOVAKIAN) (AEP)	
4-240-859-12	MANUAL, INSTRUCTION (DANISH, FINNISH) (AEP)	
4-242-689-11	MANUAL, INSTRUCTION (ENGLISH, SIMPLIFIED CHINESE) (CH)	

- Abbreviation
  AUS : Australian model
  CH : Chinese model
  SP : Singapore model

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

MICRO Hi-Fi COMPONENT SYSTEM

9-873-990-02 **Sony Corporation**
2002K0500-1 **Home Audio Company**
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Published by Sony Engineering Corporation

SONY®

HCD-M90

SERVICE MANUAL

Ver 1.4 2004.09

US Model
Canadian Model
AEP Model
UK Model
E Model
Australian Model
Chinese Model

HCD-M90 is the Amplifier, DVD player, Tape Deck and Tuner section in CMT-M90DVD.

DVD Section	Model Name Using Similar Mechanism	NEW
	DVD Mechanism Type	CDM55D-DVBU8B
	Base Unit Name	DVBU8B
	Optical Pick-up Name	KHM-240AAA (TYPE A)
		KHM-270AAA (TYPE B)
TAPE Section	Model Name Using Similar Mechanism	HCD-M70

SPECIFICATIONS

Amplifier section

For the U.S. model
AUDIO POWER SPECIFICATIONS
POWER OUTPUT AND TOTAL HARMONIC DISTORTION:
With 6-ohm loads, both channels driven, from 70 - 20,000 Hz; rated 18 watts per channel minimum RMS power, with no more than 0.9% total harmonic distortion from 250 milliwatts to rated output.

North American model:
Continuous RMS power output (reference): 20 + 20 W (6 ohms at 1 kHz, 10% THD)
Total harmonic distortion less than 0.07% (6 ohms at 1 kHz, 12 W)

European, Chinese models:
DIN power output (rated): 15 + 15 W (6 ohms at 1 kHz, DIN)
Continuous RMS power output (reference): 20 + 20 W (6 ohms at 1 kHz, 10% THD)
Music power output (reference): 40 + 40 W

Other models:
The following measured at 230 V AC, 60 Hz
DIN power output (rated): 15 + 15 W (6 ohms at 1 kHz, DIN)
Continuous RMS power output (reference): 18 + 18 W (6 ohms at 1 kHz, 10% THD)
The following measured at 220 V AC, 60 Hz
DIN power output (rated): 12 + 12 W (6 ohms at 1 kHz, DIN)
Continuous RMS power output (reference): 15 + 15 W (6 ohms at 1 kHz, 10% THD)

Inputs
AUDIO IN MD (VIDEO) (phono jacks): Sensitivity 500/250 mV, impedance 47 kilohms

Outputs
VIDEO OUT: (phono jack) max. output level 1 Vp-p, unbalanced, Sync negative, load impedance 75 ohms
S-VIDEO OUT: (4-pin/mini-DIN jack) Y: 1 Vp-p, unbalanced, Sync negative, C: 0.286Vp-p, load impedance 75 ohms
OPTICAL OUT: Optical Wavelength: 660 nm

PHONES: Accepts headphones with an impedance of 8 ohms or more
SPEAKER: accepts impedance of 6 to 16 ohms.

DVD player section
Laser: Semiconductor laser (DVD: λ=650 nm, CD: λ=780 nm) Emission duration: continuous
Frequency response: DVD (PCM 48 kHz): 2 Hz – 22 kHz = (±1 dB) CD: 2 Hz – 20 kHz = (±1 dB)
Signal-to-noise ratio: More than 90 dB
Dynamic range: More than 90 dB
Video color system format: NTSC, PAL

Tape deck section
Recording system: 4-track 2-channel stereo
Frequency response: 50 – 13,000 Hz (±3 dB), using Sony TYPE I cassettes

– Continued on next page –

DVD DECK RECEIVER

9-873-991-05
2004I05-1
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Sony Corporation
Personal Audio Company
Published by Sony Engineering Corporation

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Tuner section

FM stereo, FM/AM superheterodyne tuner

FM tuner section

Tuning range	
North American model:	87.5 - 108.0 MHz (100-kHz step)
Other models:	87.5 - 108.0 MHz (50-kHz step)
Antenna	FM wire antenna
Antenna terminals	75 ohms unbalanced
Intermediate frequency	10.7 MHz

AM tuner section

Tuning range	
Pan American model:	530 - 1,710 kHz (with the tuning interval set at 10 kHz) 531 - 1,710 kHz (with the tuning interval set at 9 kHz)
European model:	531 - 1,602 kHz (with the tuning interval set at 9 kHz)
Other models:	530 - 1,710 kHz (with the tuning interval set at 10 kHz) 531 - 1,602 kHz (with the tuning interval set at 9 kHz)
Antenna	AM loop antenna, external antenna terminal
Intermediate frequency	450 kHz

General

Power requirements	
North American model:	120 V AC, 60 Hz
European model:	230 V AC, 50/60 Hz
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Chinese model:	220 V AC, 50/60 Hz
Other models:	110 – 120 V or 220 – 240 V AC, 50/60 Hz Adjustable with voltage selector
Power consumption	
European model:	see the name plate 0.3 watts (at the Power Saving mode)
Other models:	see the name plate

Dimensions (w/h/d) incl. projecting parts and controls

Amplifier/Tuner/Tape/DVD section:
Approx. 159 × 217 × 335 mm

Mass

Amplifier/Tuner/Tape/DVD section:
Approx. 5.7 kg

Design and specifications are subject to change without notice.

Notes on chip component replacement

- Never reuse a disconnected chip component.
- Notice that the minus side of a tantalum capacitor may be damaged by heat.

Flexible Circuit Board Repairing

- Keep the temperature of the soldering iron around 270 ˚C during repairing.
- Do not touch the soldering iron on the same conductor of the circuit board (within 3 times).
- Be careful not to apply force on the conductor when soldering or unsoldering.

SAFETY CHECK-OUT

After correcting the original service problem, perform the following safety check before releasing the set to the customer:
Check the antenna terminals, metal trim, “metallized” knobs, screws, and all other exposed metal parts for AC leakage.
Check leakage as described below.

LEAKAGE TEST

The AC leakage from any exposed metal part to earth ground and from all exposed metal parts to any exposed metal part having a return to chassis, must not exceed 0.5 mA (500 microamperes.). Leakage current can be measured by any one of three methods.

1. A commercial leakage tester, such as the Simpson 229 or RCA WT-540A. Follow the manufacturers’ instructions to use these instruments.
2. A battery-operated AC milliammeter. The Data Precision 245 digital multimeter is suitable for this job.
3. Measuring the voltage drop across a resistor by means of a VOM or battery-operated AC voltmeter. The “limit” indication is 0.75 V, so analog meters must have an accurate low-voltage scale. The Simpson 250 and Sanwa SH-63Trd are examples of a passive VOM that is suitable. Nearly all battery operated digital multimeters that have a 2 V AC range are suitable. (See Fig. A)

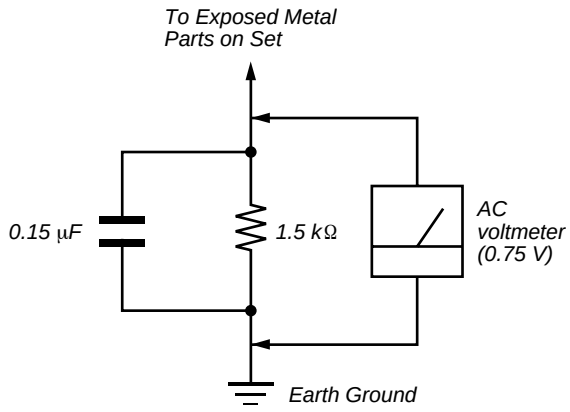
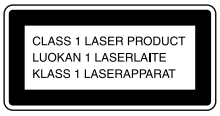


Fig. A. Using an AC voltmeter to check AC leakage.

CAUTION
Use of controls or adjustments or performance of procedures other than those specified herein may result in hazardous radiation exposure.

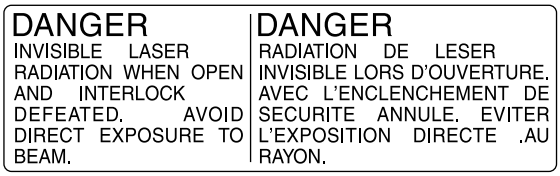


This appliance is classified as a CLASS 1 LASER product. This label is located on the rear exterior.

This label is located inside the unit.

The following caution label is located inside the apparatus.

CAUTION : VISIBLE AND INVISIBLE LASER RADIATION WHEN OPEN. AVOID EXPOSURE TO BEAM.
ADVARSEL : SYNLIG OG USYNLIG LASERSTRÅLING VED ÅBNING. UNDGÅ UDSÆTTELSE FOR STRÅLING.
VORSICHT : SICHTBARE UND UNSICHTBARE LASERSTRAHLUNG WENN ABDECKUNG GEÖFFNET. NICHT DEM STRAHL AUSSETZEN.
VARO ! : NÄKYVÄÄ JA NÄKYMÄTÖN AVATTAESSA OLET ALTTIINA LASERSÄTEILYLLE. ÄLÄ KATSO SÄTEESEEN.
VARNING : SYNLIG OCH OSYNLIG LASERSTRÅLNING NÄR DENNA DEL ÄR ÖPPNAD. STRÅLEN ÄR FARLIG.
ADVARSEL : SYNLIG OG USYNLIG LASERSTRÅLING NÅR DEKSEL ÅPNES. UNNGÅ EKSPONERING FOR STRÅLEN.
FIGYELEM : A BURKOLAT MEGBONTÁSAKOR LÁTHATÓ ÉS LÁTHATATLAN LÉZERSUGÁR LÉPHET KI A KÉSZÜLÉKBÖL. ÓVAKODJON A KÖZVETLEN LÉZERSUGÁRTÓL!


DANGER
INVISIBLE LASER RADIATION WHEN OPEN AND INTERLOCK DEFEATED. AVOID DIRECT EXPOSURE TO BEAM.
DANGER
RADIATION DE LESER INVISIBLE LORS D'OUVERTURE, AVEC L'ENCLENCHEMENT DE SECURITE ANNULE. EVITER L'EXPOSITION DIRECTE .AU RAYON.

与安全有关的零部件须知

在原理图上用阴影及⚠标记来识别的零部件在安全操作上是具有关键性的。这些零部件要用本手册中所示的部件号对应的索尼零部件进行更换。

在安全操作上具有关键性的电路调整与索尼公司出版的维修手册完全一致。在更换关键零部件时或怀疑动作失常时，请进行这些调整操作。

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ OR DOTTED LINE WITH MARK ⚠ ON THE SCHEMATIC DIAGRAMS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY.

ATTENTION AU COMPOSANT AYANT RAPPORT À LA SÉCURITÉ!

LES COMPOSANTS IDENTIFIÉS PAR UNE MARQUE ⚠ SUR LES DIAGRAMMES SCHÉMATIQUES ET LA LISTE DES PIÈCES SONT CRITIQUES POUR LA SÉCURITÉ DE FONCTIONNEMENT. NE REMPLACER CES COMPOSANTS QUE PAR DES PIÈCES SONY DONT LES NUMÉROS SONT DONNÉS DANS CE MANUEL OU DANS LES SUPPLÉMENTS PUBLIÉS PAR SONY.

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SECTION 1
SERVICING NOTES

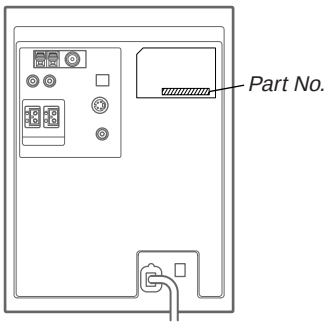
NOTES ON HANDLING THE OPTICAL PICK-UP BLOCK OR BASE UNIT

The laser diode in the optical pick-up block may suffer electrostatic break-down because of the potential difference generated by the charged electrostatic load, etc. on clothing and the human body.
During repair, pay attention to electrostatic break-down and also use the procedure in the printed matter which is included in the repair parts.
The flexible board is easily damaged and should be handled with care.

NOTES ON LASER DIODE EMISSION CHECK

The laser beam on this model is concentrated so as to be focused on the disc reflective surface by the objective lens in the optical pick-up block. Therefore, when checking the laser diode emission, observe from more than 30 cm away from the objective lens.

MODEL IDENTIFICATION
– Back Panel –

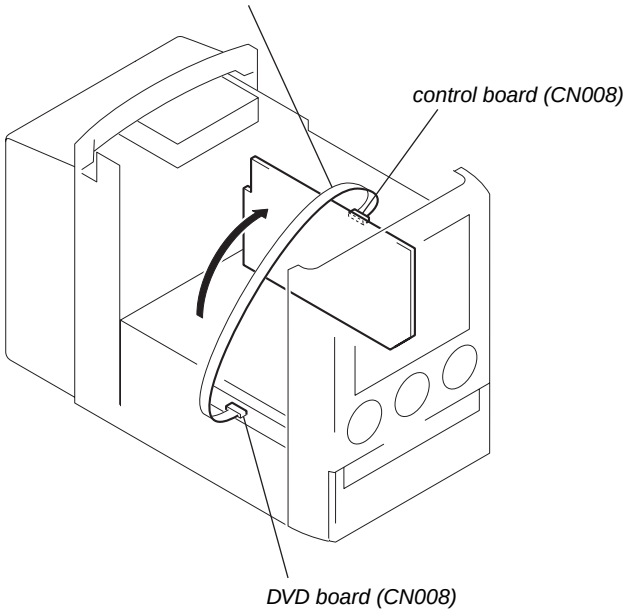


Model Name	Part No.
AEP and UK models	4-239-822-0□
US and Canadian models	4-239-823-0□
Singapore model	4-239-824-0□
Australian model	4-240-899-0□
Chinese model	4-242-690-0□

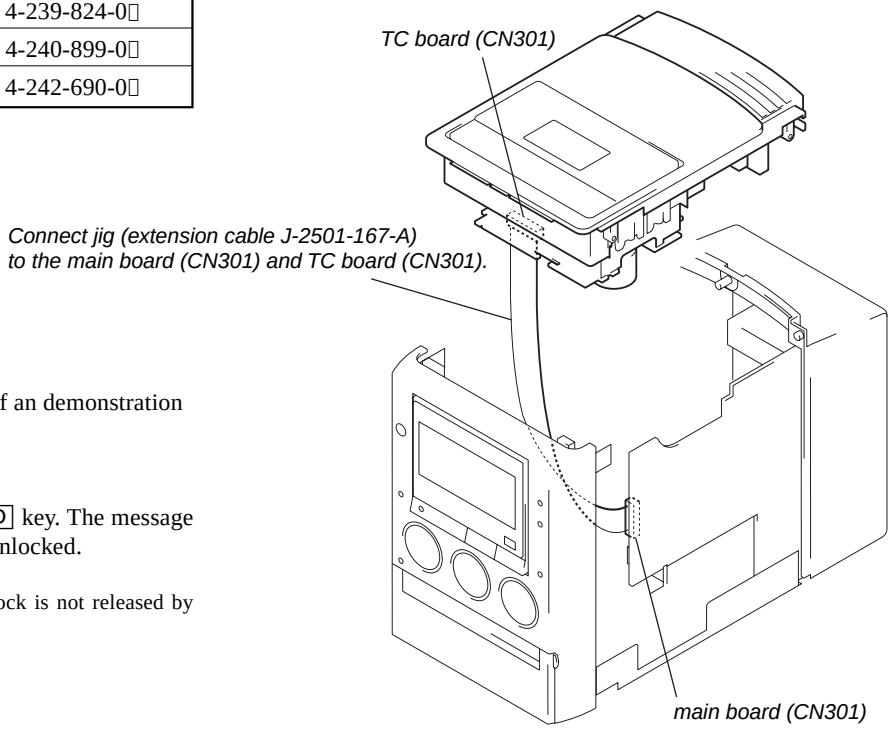
SERVICE POSITION

In checking the control board, prepare jig (extension cable J-2501-219-B: 1.00 mm Pitch, 10 cores, Length 300 mm).

Connect jig (extension cable J-2501-219-B) to the control board (CN507) and DVD board (CN101).



In checking the tape deck section, prepare jig (extension cable J-2501-167-A: 1.25 mm Pitch, 17 cores, Length 300 mm).



RELEASING THE DISC TRAY LOCK

The disc tray lock function for the antitheft of an demonstration disc in the store is equipped.

Releasing Procedure :

While pressing the ■ key, press the ⏏ DVD key. The message "UNLOCKED" is displayed and the tray is unlocked.

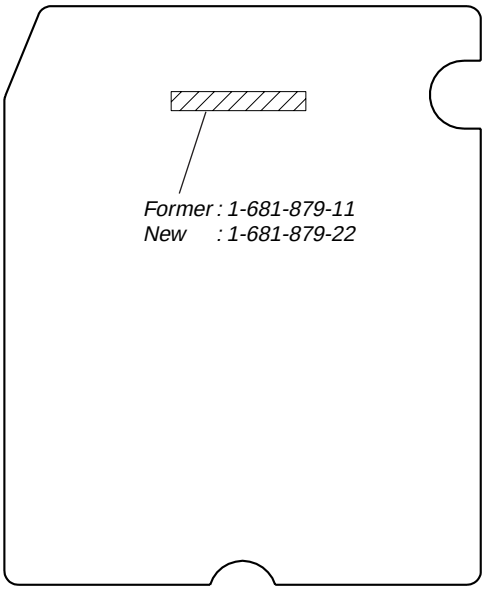
Note: When "LOCKED" is displayed, the tray lock is not released by turning power on/off with the I/⏻ button.

NEW/FORMER DISCRIMINATION

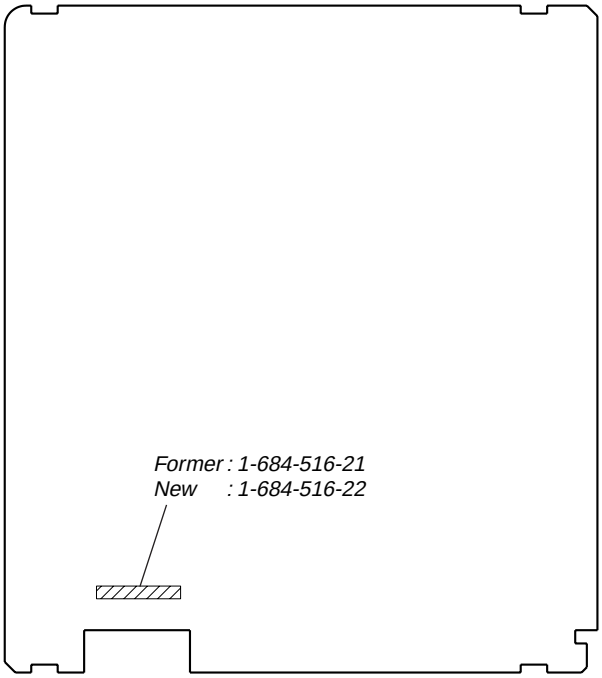
In this set, RF-240, DVD, TC, MAIN, JACK, CONTROL, SWITCH and POWER boards have been changed in the midway of production.

Note: Chinese model is produced only with the new boards.

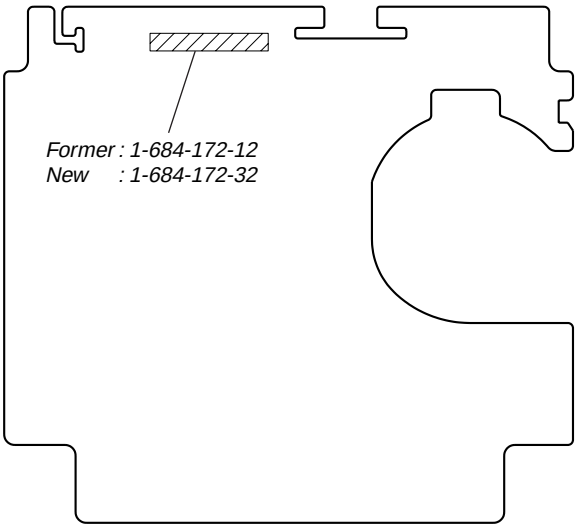
– RF-240 BOARD (Side A) –



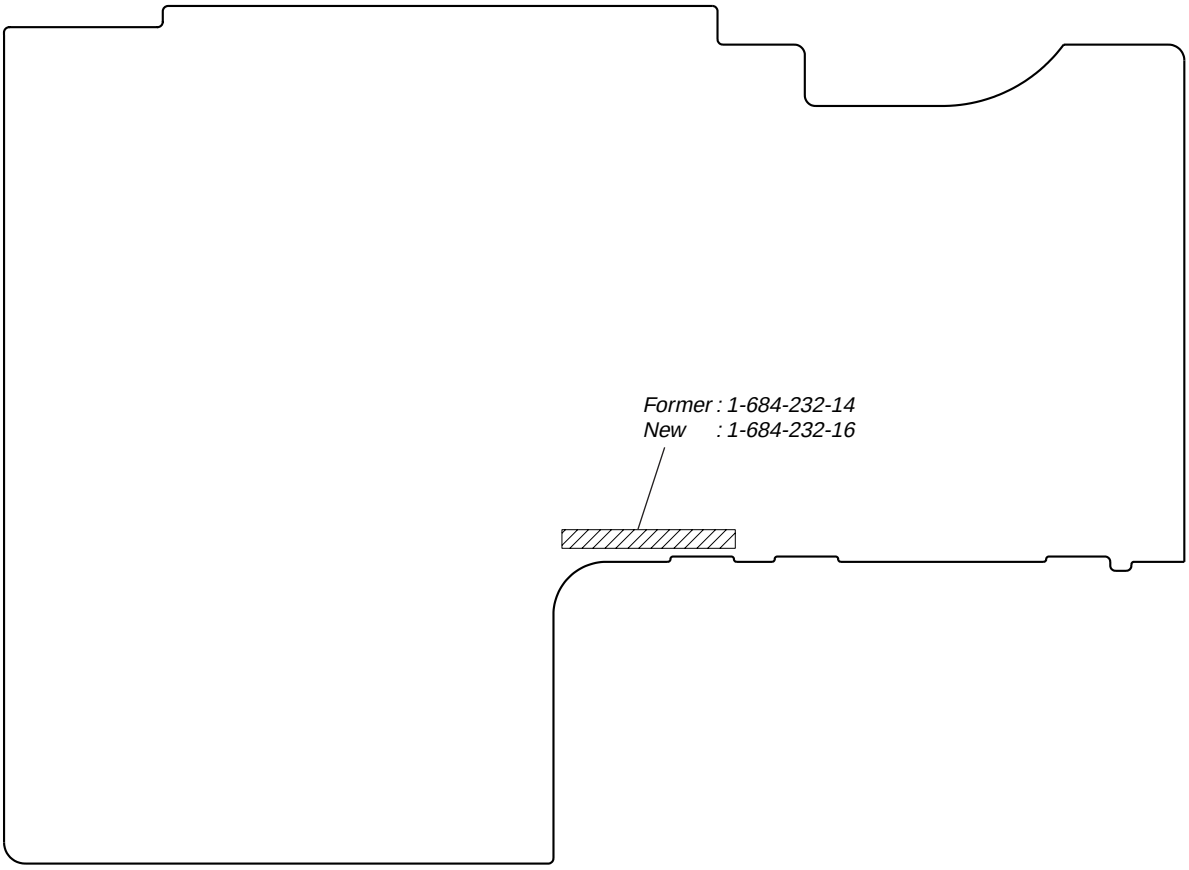
– DVD BOARD (Side B) –



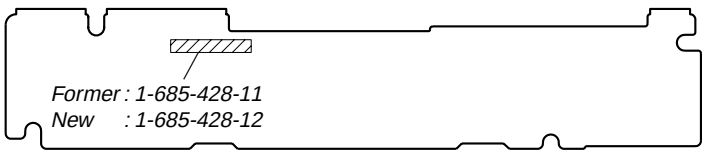
– TC BOARD (Component Side) –



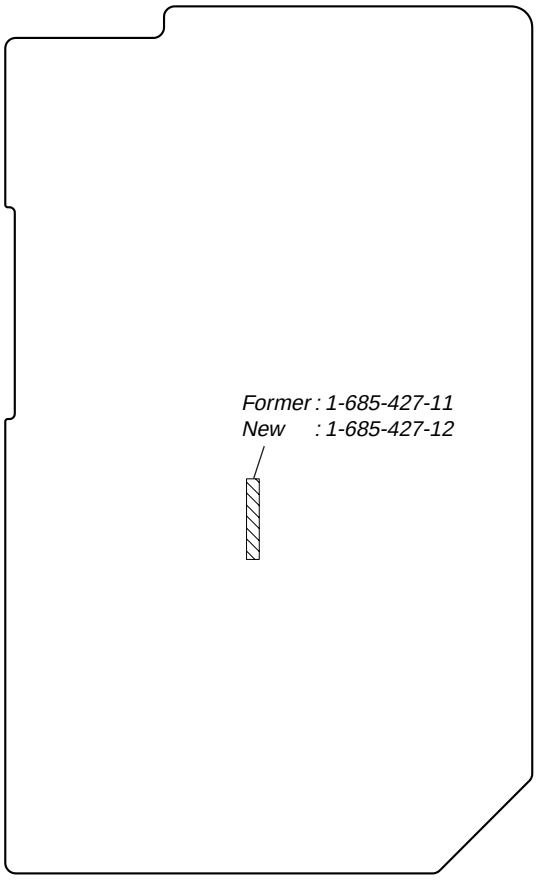
– MAIN BOARD (Component Side) –



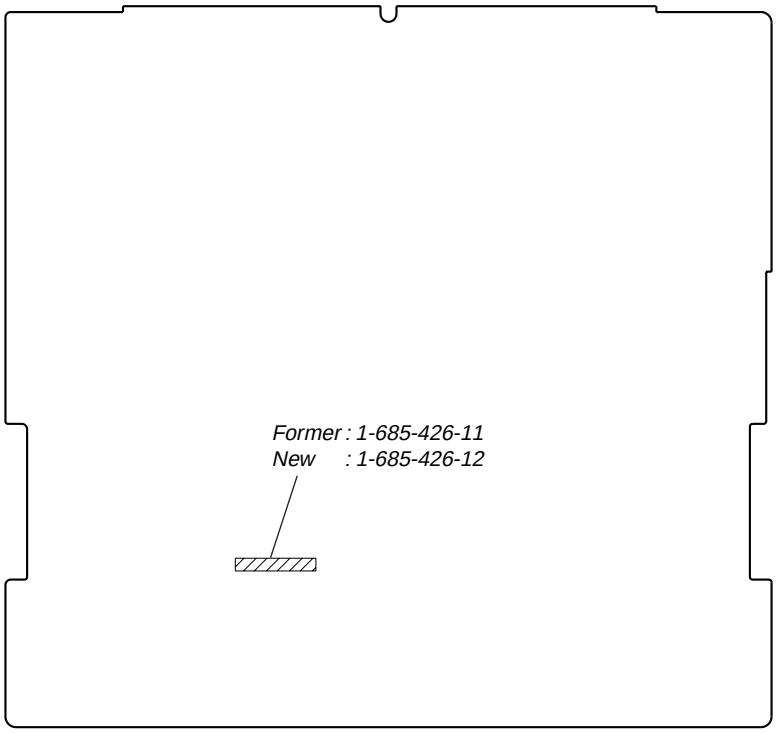
– JACK BOARD (Component Side) –



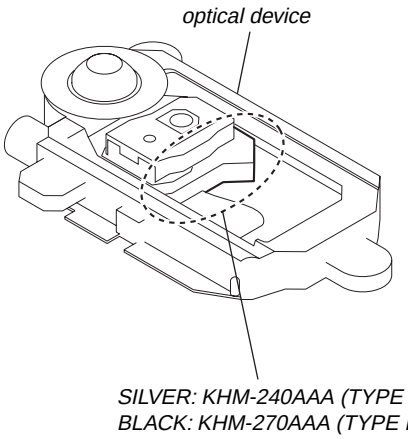
– CONTROL BOARD (Component Side) –



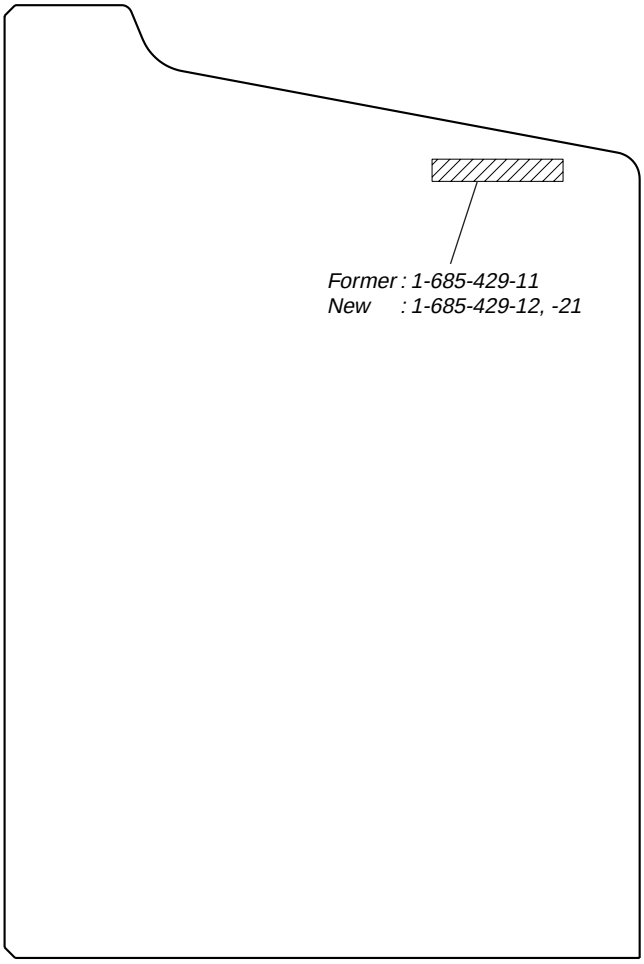
– SWITCH BOARD (Component Side) –



TYPE A/B DISCRIMINATION



– POWER BOARD (Component Side) –



NOTE OF REPLACING THE DVD BOARD

When replacing the DVD board, since the adjustment value is not set up correctly, “Drive Auto Adjustment” can’t be performed. In this case, initialize Memory in the following procedures.

Procedure:

1. Set the test mode. (See page 18)
2. Press the [2] key of the remote commander, and set the “DRIVE MANUAL OPERATION”. (See page 23)
3. Press the [6] key of the remote commander, and set the “2-6, Memory Check”. (See page 25)
4. Press the [CLEAR] key of the remote commander, and initialize Memory.

SECTION 2
GENERAL

This section is extracted from instruction manual.

Main unit

ALPHABETICAL ORDER

A – F

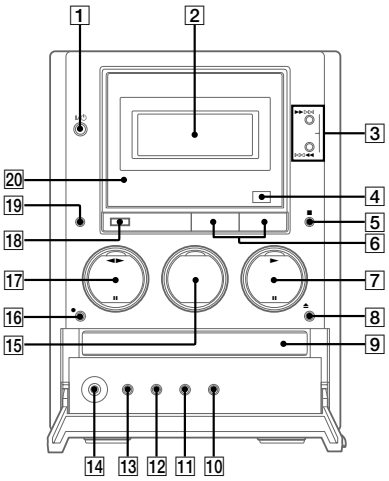
CD SYNCHRO 11
CD SYNCHRO indicator 20
DIRECTION 10
Disc tray 9
Display window 2
DSG 18
DVD ► 7
DVD ❚❚ 7
FUNCTION 19

P – V

PHONES jack 14
PLAY MODE/TUNING MODE 13
Remote sensor 4
REPEAT/FM MODE 12
TAPE ◄/► 17
TAPE ❚❚ 17
TUNER AM 15
TUNER FM 15
TUNING +/– 3
VOLUME +/– 6

BUTTON DESCRIPTIONS

I/⏻ (power) 1
◄◄/►► 3
⏮/⏭ 3
■ 5
⏏ DVD 8
● REC 16



Remote Control

ALPHABETICAL ORDER

A – E

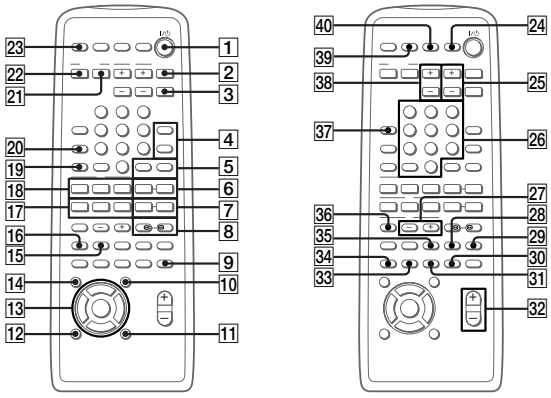
ANGLE 31
AUDIO 33
BASS/TREBLE 3
CLEAR 19
CLOCK/TIMER SELECT 22
CLOCK/TIMER SET 21
CURSOR ←/→ 5
DISPLAY 15
DSG 2
DVD DISPLAY 12
DVD MENU 10
DVD TOP MENU 14
DVD SETUP 34
DVD ►/SELECT 17
DVD ❚❚ 17
DVD ■ 17
DVD ⏮/⏭ 7
DVD ◄❚⏮/⏭❚► 8
ENTER/YES 20

F – W

FUNCTION 16
Numeric buttons 26
PLAY MODE/TUNING MODE 28
REPEAT/FM MODE 29
RETURN ↶ 11
SCROLL 35
SLEEP 23
SUBTITLE 30
TAPE ◄/► 18
TAPE ❚❚ 18
TAPE ■ 18
TAPE ◄◄/►► 6
TUNER BAND 36
TUNER +/– 27
TUNING MEMORY 37
TV I/⏻ 24
TV CH +/– 25
TV VOL +/– 38
TV VIDEO 40
VES 9
VOL +/– 32
WIDE 39

BUTTON DESCRIPTIONS

I/⏻ (power) 1
↑/↓/←/→/ENTER 13
+/– 4



Setting the clock

1 Press I/⏻ to turn on the system.

2 Press CLOCK/TIMER SET on the remote.

3 Press + or on the remote repeatedly to set the hour.

4 Press ENTER/YES or CURSOR→ on the remote.

5 Press + or on the remote repeatedly to set the minute.

6 Press ENTER/YES on the remote.
The clock starts working.

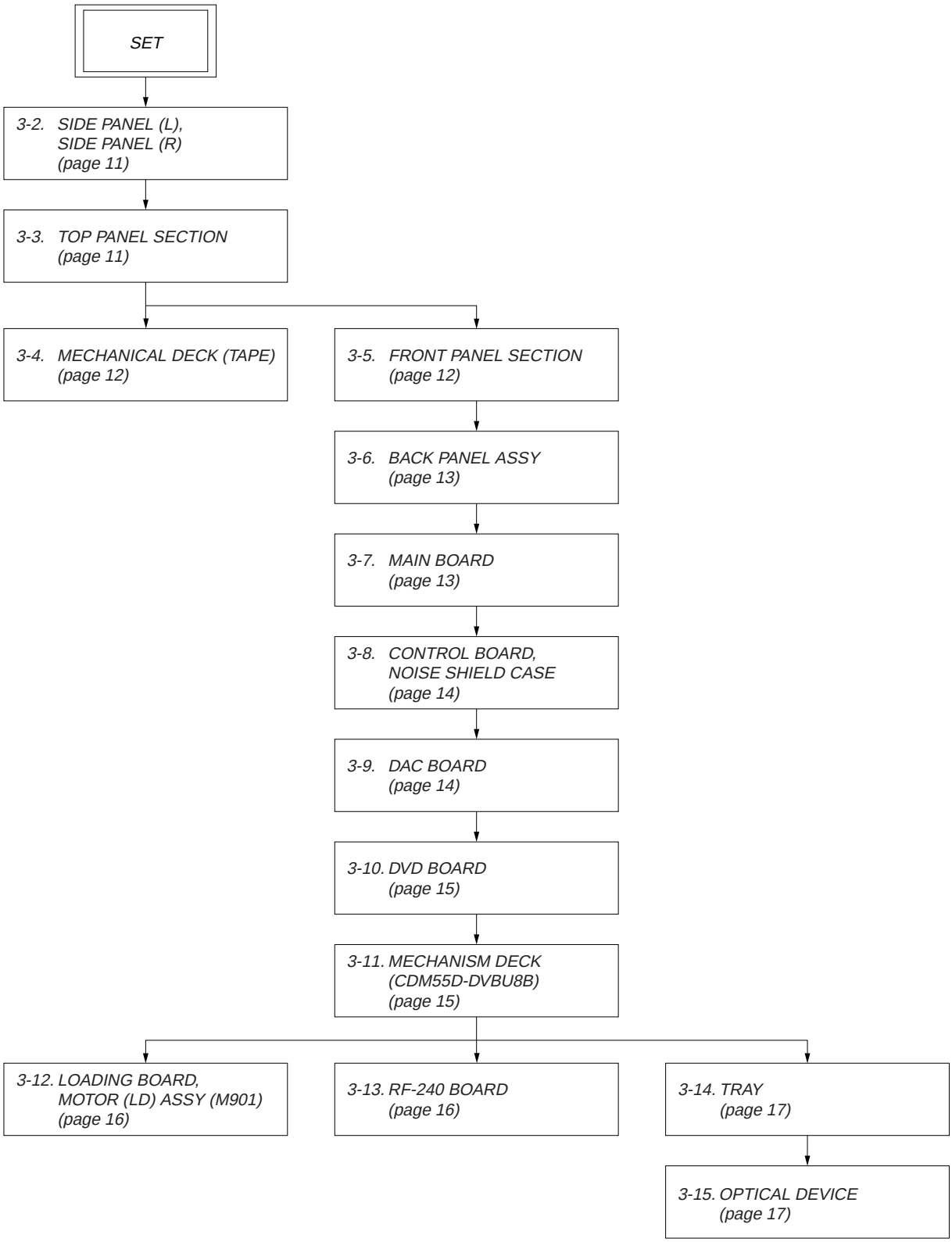
To adjust the clock

1 Press CLOCK/TIMER SET on the remote.
2 Press + or on the remote to select ÔCLOCK SET?Ó then press ENTER/YES on the remote.
3 Do the same procedures as step 3 to 6 above.

SECTION 3
DISASSEMBLY

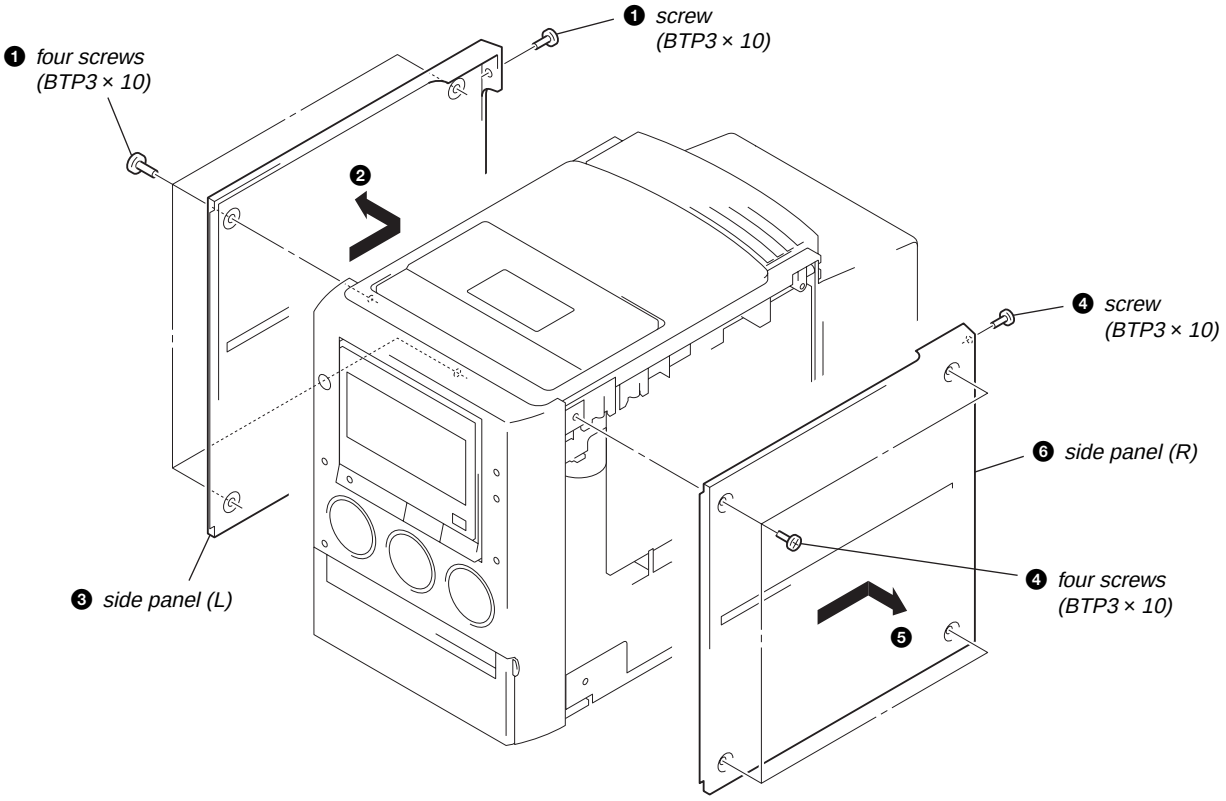
• This set can be disassembled in the order shown below.

3-1. DISASSEMBLY FLOW

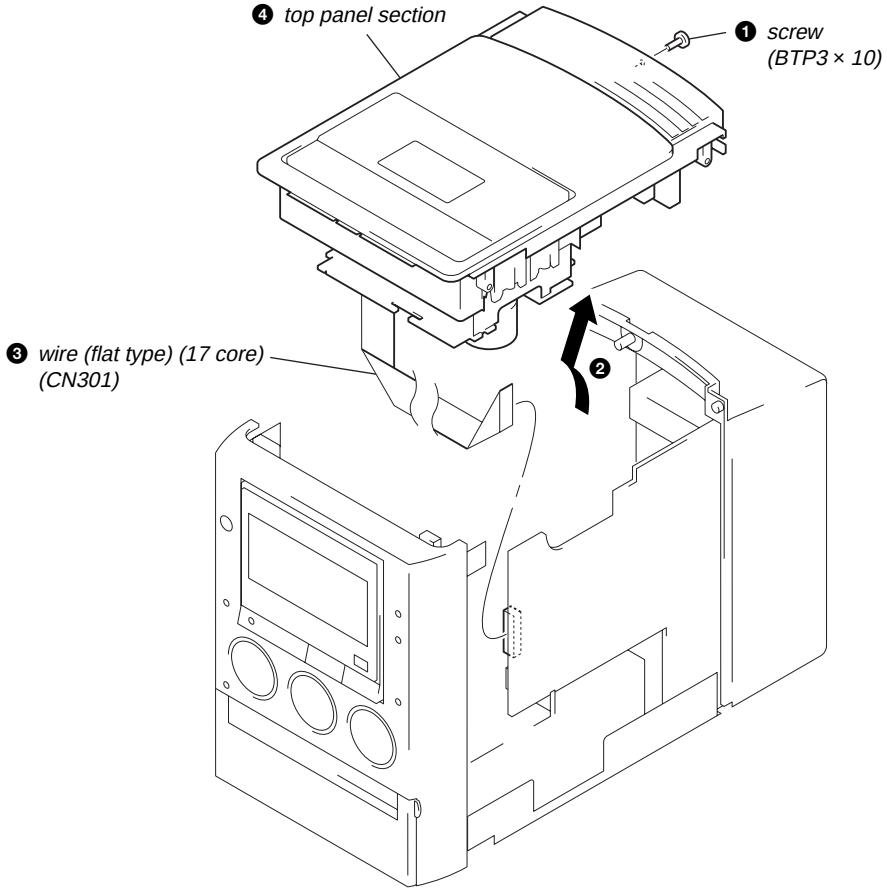

SET
3-2. SIDE PANEL (L), SIDE PANEL (R) (page 11)
3-3. TOP PANEL SECTION (page 11)
3-4. MECHANICAL DECK (TAPE) (page 12)
3-5. FRONT PANEL SECTION (page 12)
3-6. BACK PANEL ASSY (page 13)
3-7. MAIN BOARD (page 13)
3-8. CONTROL BOARD, NOISE SHIELD CASE (page 14)
3-9. DAC BOARD (page 14)
3-10. DVD BOARD (page 15)
3-11. MECHANISM DECK (CDM55D-DVBU8B) (page 15)
3-12. LOADING BOARD, MOTOR (LD) ASSY (M901) (page 16)
3-13. RF-240 BOARD (page 16)
3-14. TRAY (page 17)
3-15. OPTICAL DEVICE (page 17)

Note: Follow the disassembly procedure in the numerical order given.

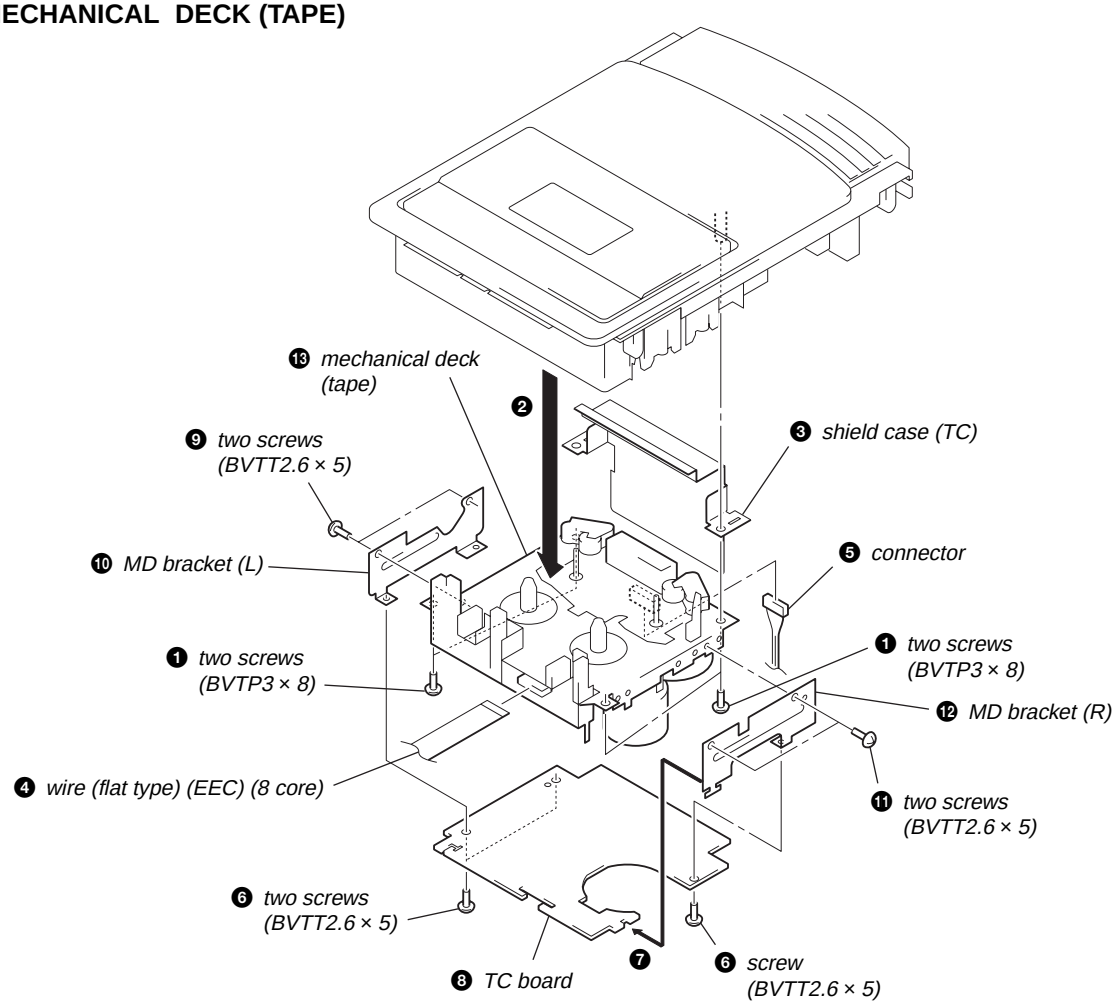
3-2. SIDE PANEL (L), SIDE PANEL (R)



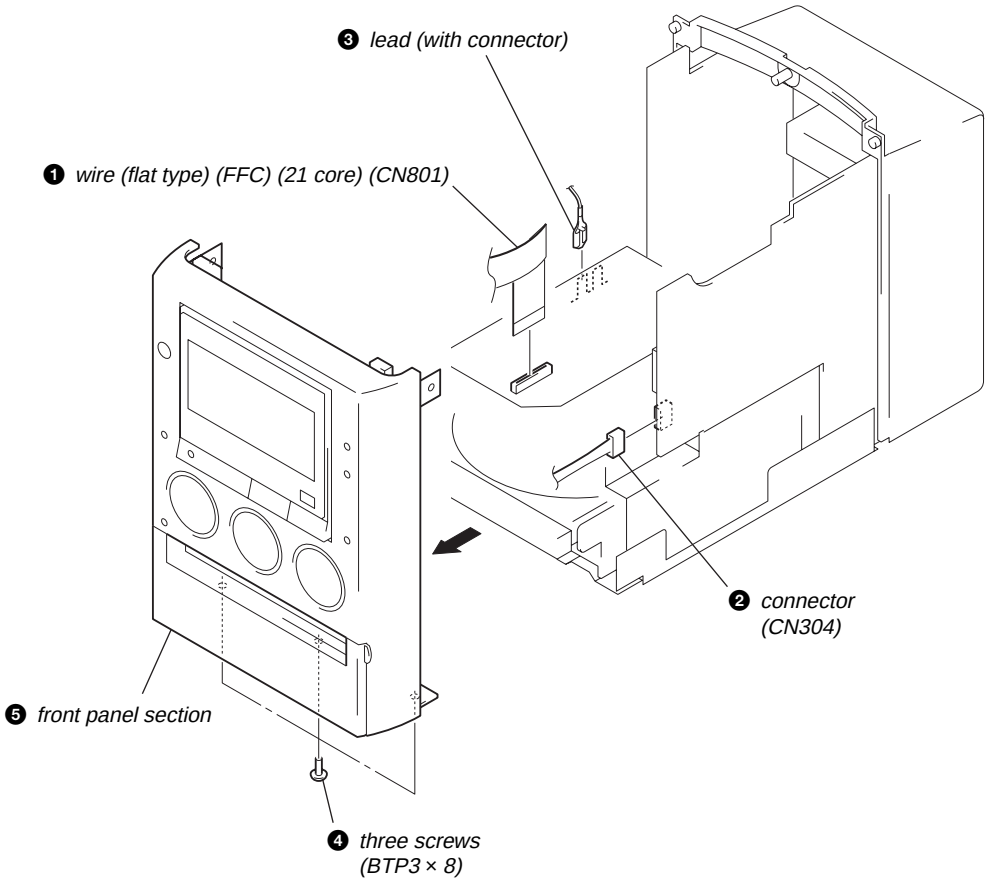
3-3. TOP PANEL SECTION



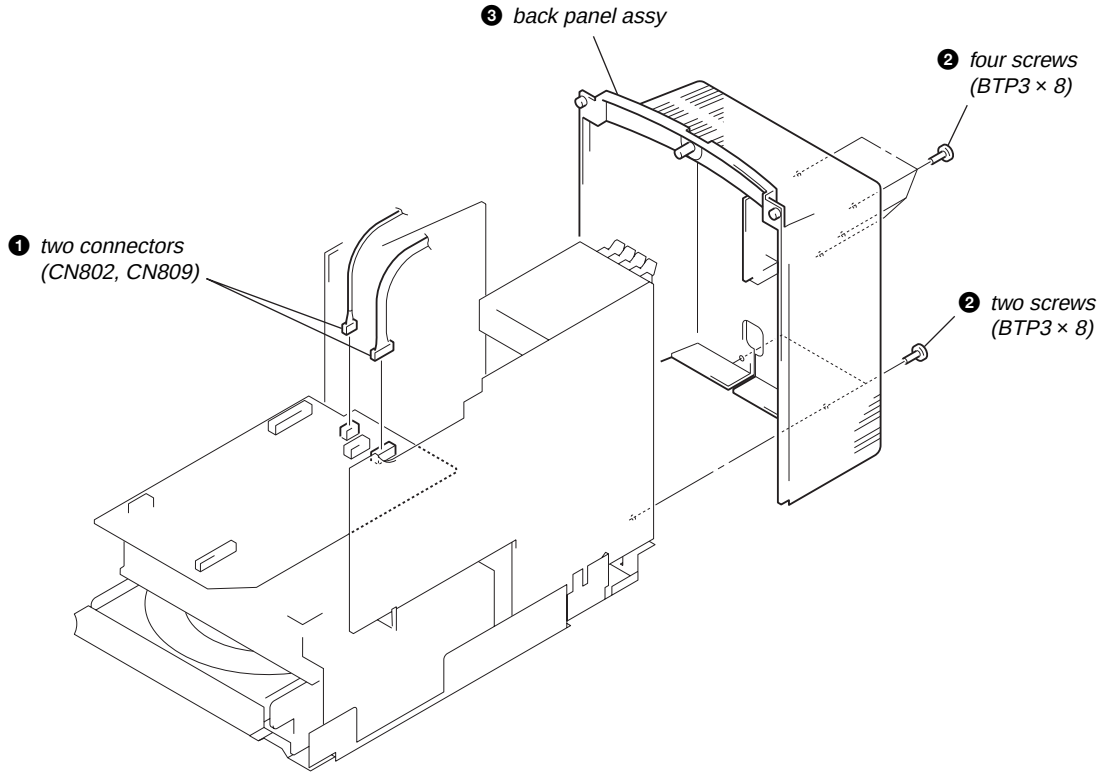
3-4. MECHANICAL DECK (TAPE)


⓭ mechanical deck (tape)
❷
❾ two screws (BVTT2.6 × 5)
❸ shield case (TC)
❿ MD bracket (L)
❺ connector
❶ two screws (BVTP3 × 8)
❶ two screws (BVTP3 × 8)
⓬ MD bracket (R)
❹ wire (flat type) (EEC) (8 core)
⓫ two screws (BVTT2.6 × 5)
❻ two screws (BVTT2.6 × 5)
❼
❻ screw (BVTT2.6 × 5)
❽ TC board

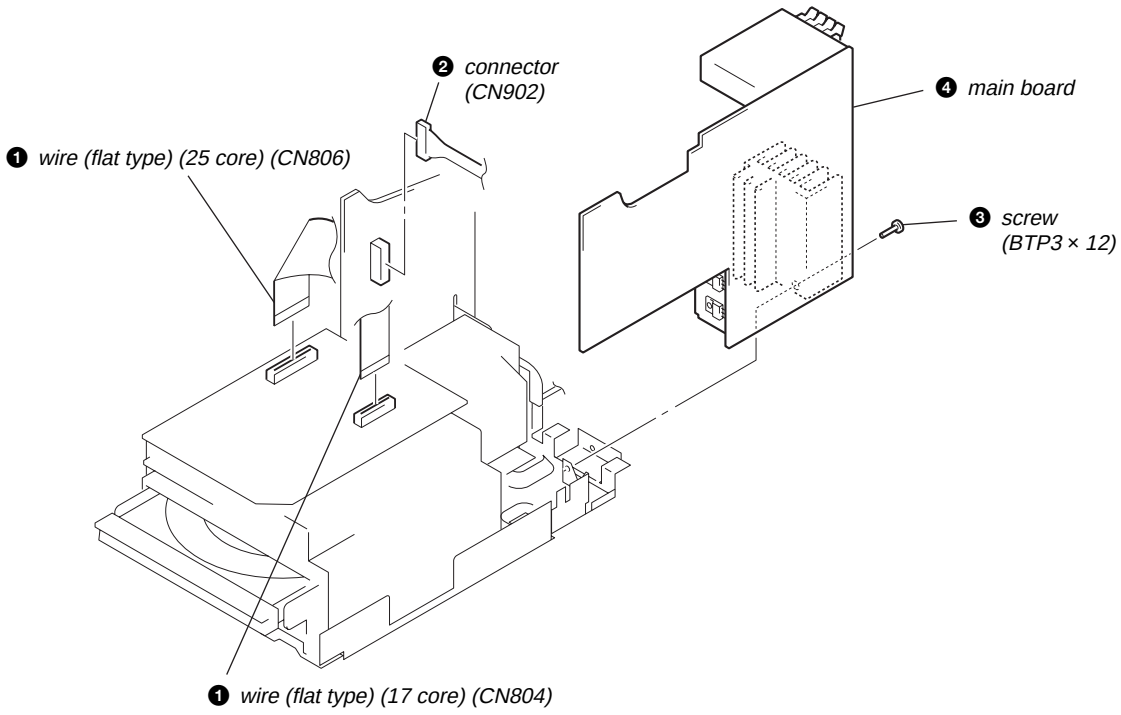
3-5. FRONT PANEL SECTION



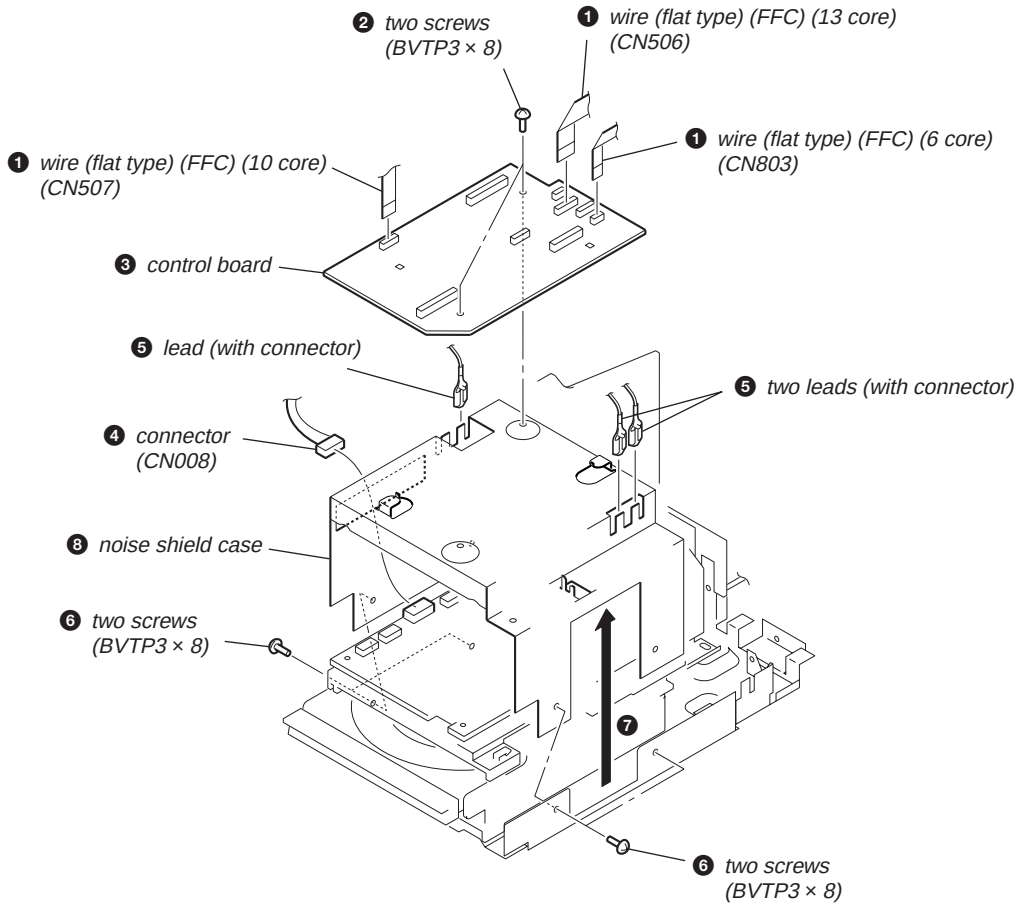
3-6. BACK PANEL ASSY



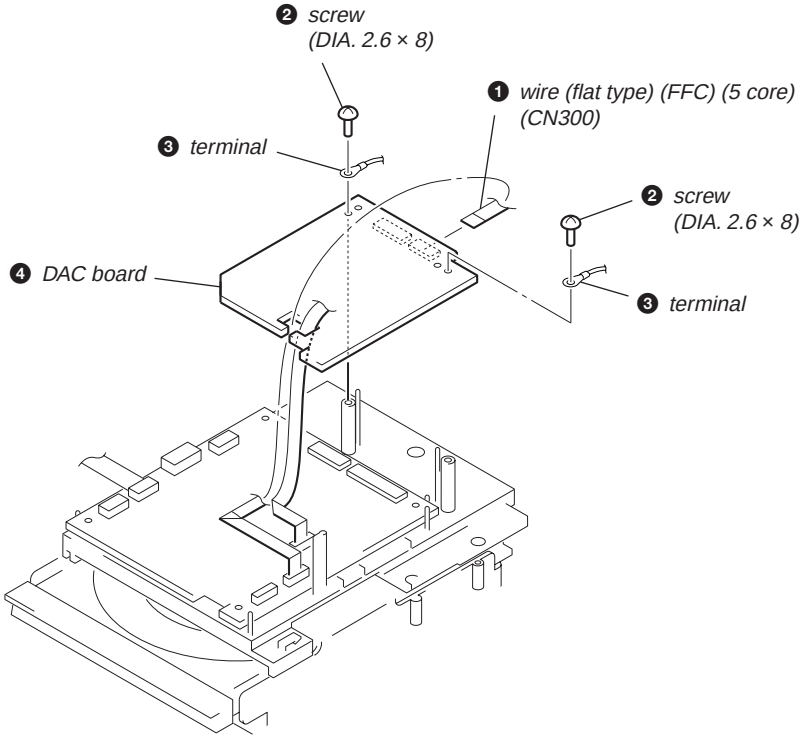
3-7. MAIN BOARD



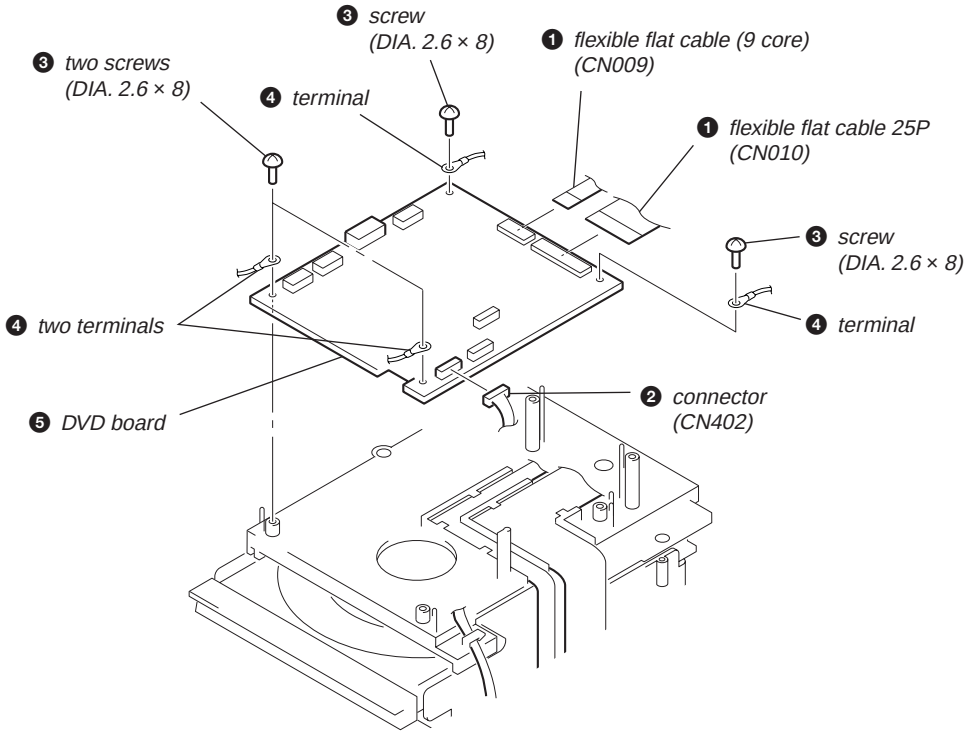
3-8. CONTROL BOARD, NOISE SHIELD CASE


❷ two screws (BVTP3 × 8)
❶ wire (flat type) (FFC) (13 core) (CN506)
❶ wire (flat type) (FFC) (6 core) (CN803)
❶ wire (flat type) (FFC) (10 core) (CN507)
❸ control board
❺ lead (with connector)
❺ two leads (with connector)
❹ connector (CN008)
❽ noise shield case
❻ two screws (BVTP3 × 8)
❼
❻ two screws (BVTP3 × 8)

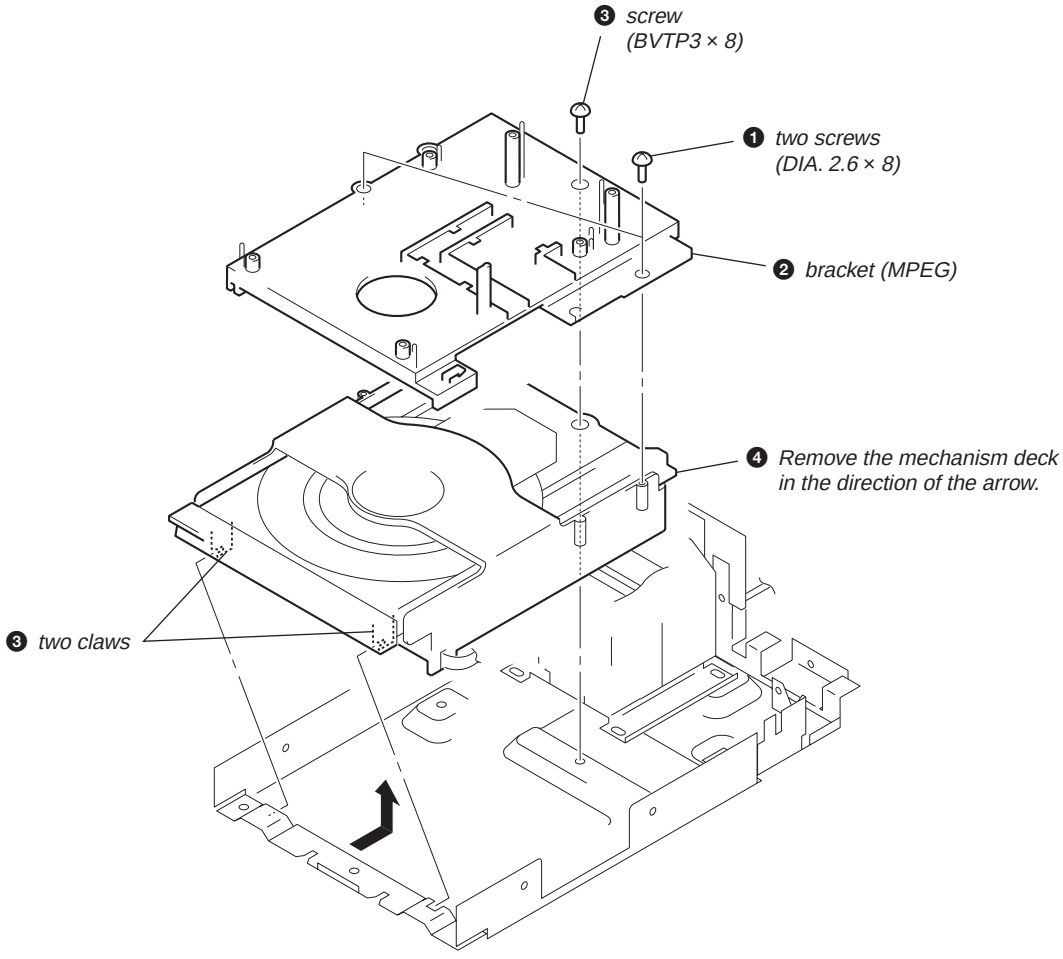
3-9. DAC BOARD



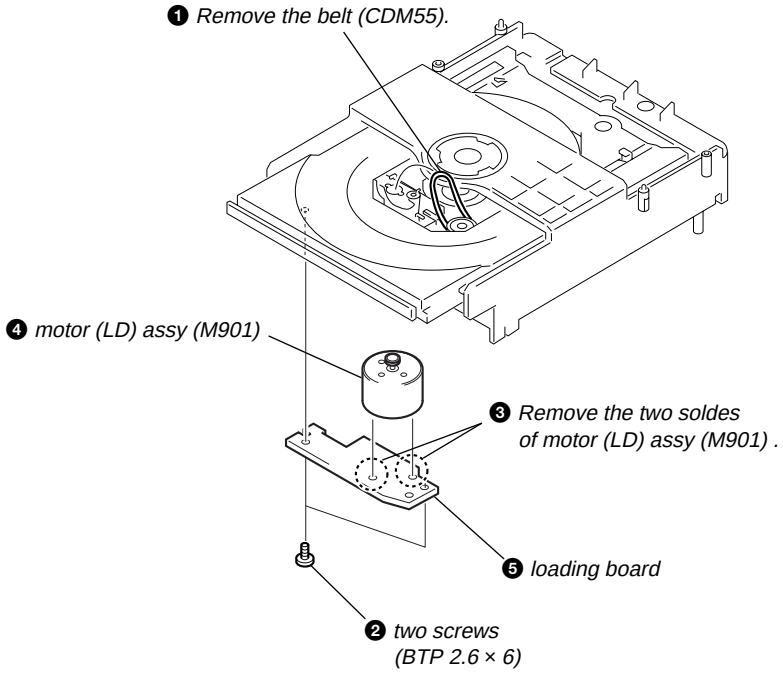
3-10. DVD BOARD



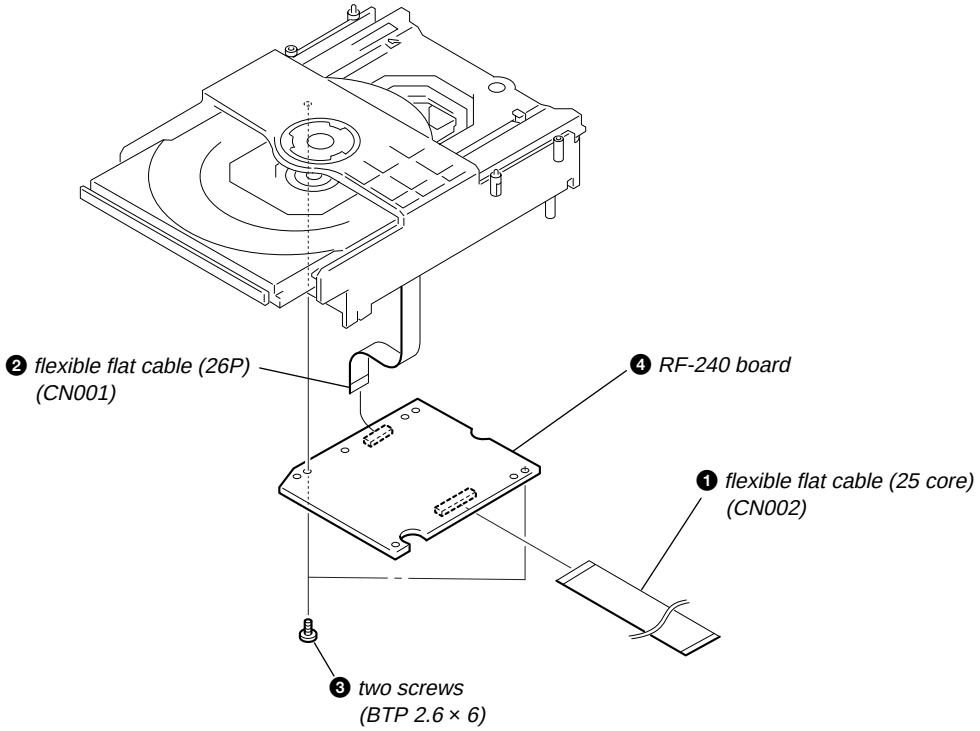
3-11. MECHANISM DECK (CDM55D-DVBU8B)



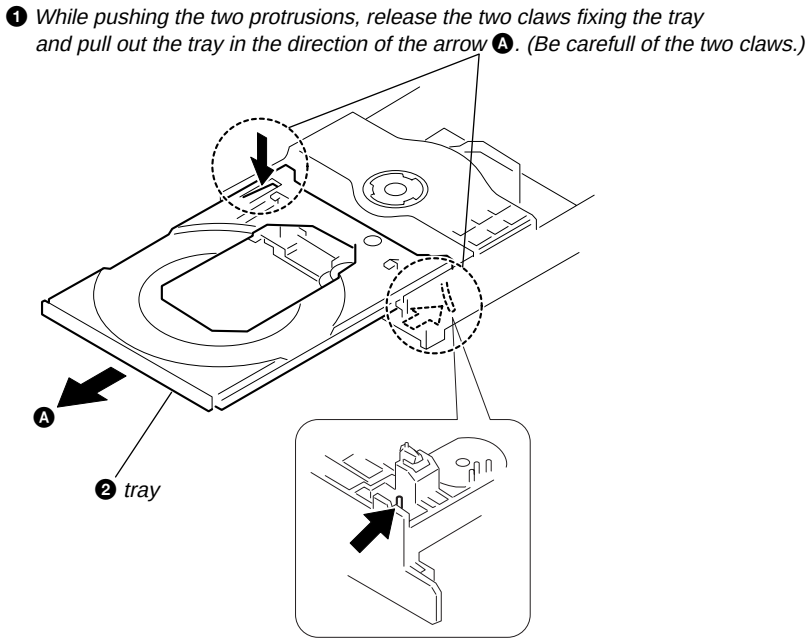
3-12. LOADING BOARD, MOTOR (LD) ASSY (M901)


❶ Remove the belt (CDM55).
❹ motor (LD) assy (M901)
❸ Remove the two soldes of motor (LD) assy (M901) .
❺ loading board
❷ two screws (BTP 2.6 × 6)

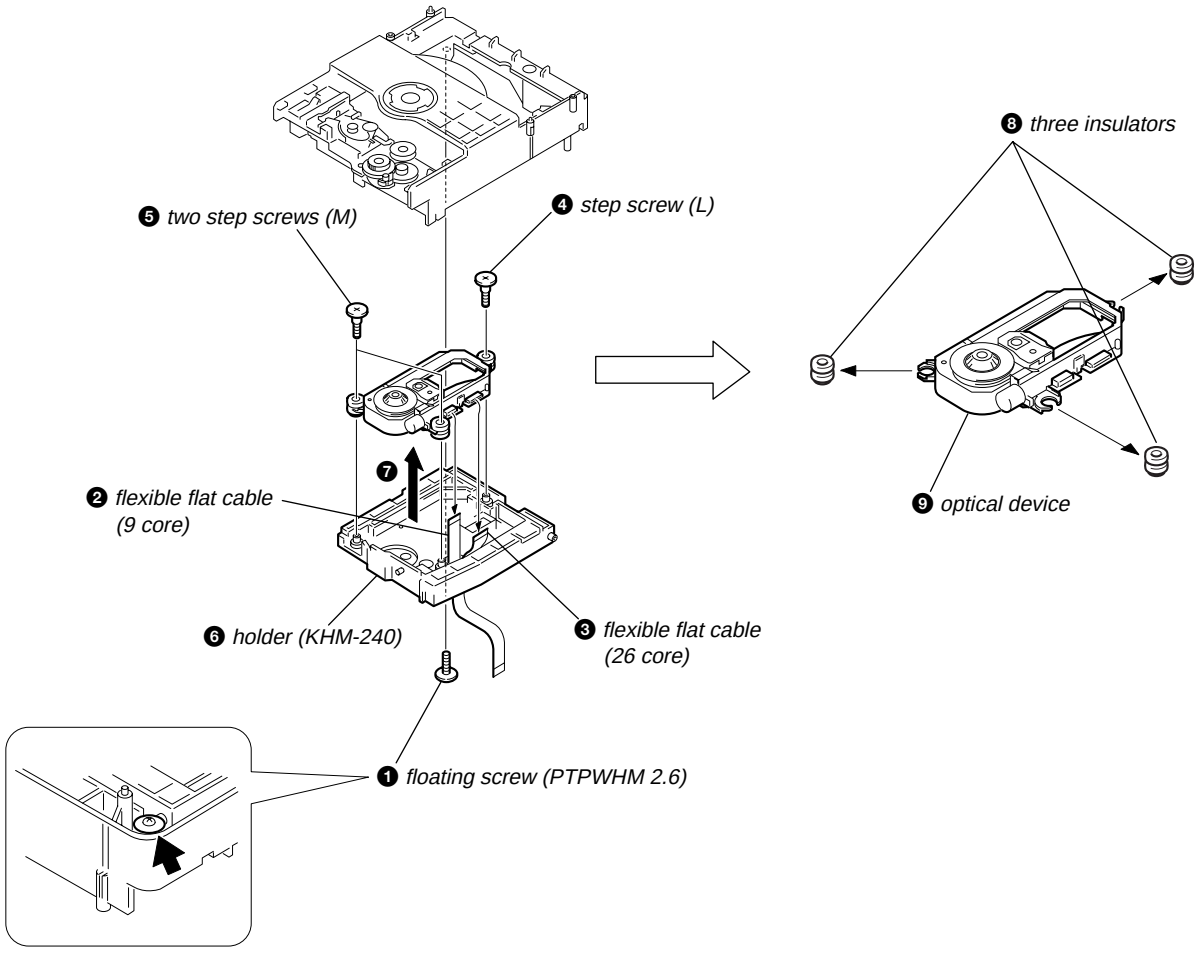
3-13. RF-240 BOARD



3-14. TRAY


❶ While pushing the two protrusions, release the two claws fixing the tray and pull out the tray in the direction of the arrow Ⓐ. (Be carefull of the two claws.)
Ⓐ
❷ tray

3-15. OPTICAL DEVICE


❽ three insulators
❺ two step screws (M)
❹ step screw (L)
❼
❷ flexible flat cable (9 core)
❾ optical device
❻ holder (KHM-240)
❸ flexible flat cable (26 core)
❶ floating screw (PTPWHM 2.6)

SECTION 4
TEST MODE

[COLD RESET]

- The cold reset clears all data including preset data stored in the RAM to initial conditions. Execute this mode when returning the set to the customer.

Procedure:

1. Press the I/⏻ key to turn the power ON.
2. Press three keys ■ , ● REC , and I/⏻ simultaneously.
3. The set is reset, and becomes standby state.

[PANEL TEST]

- This mode is used to check the liquid crystal display, LED, destination, model, software version, and key.

Procedure:

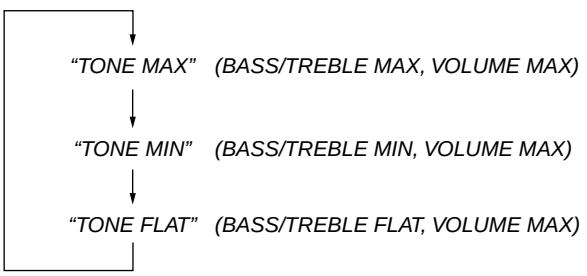
1. Press the I/⏻ key to turn the power ON.
2. Press three keys ⏏ DVD , ● REC , and FUNCTION simultaneously.
3. Liquid crystal display and LEDs are all turned on.
4. When you want to enter the version check mode, press the PLAY MODE/TUNING MODE keys. The destination and model are displayed.
5. Each time PLAY MODE/TUNING MODE key is pressed, the display changes starting from MC version, GC version, ST version, TA version, TM version, TC version, MD version, and DVD versionin this order, and returns to the MC version display.
6. When REPEAT/FM MODE key is pressed while the version numbers are being displayed except model and destination, year, month and day of the software creation appear. When REPEAT/FM MODE key is pressed again, the display returns to the software version display. When PLAY MODE/TUNING MODE key is pressed while year, month and day of the software creation are being displayed, the year, month and day of creation of the software versions are displayed in the same order of version display.
7. Press the CD SYNCHRO key, and the key check mode is activated.
8. In the key check mode, the liquid crystal display displays “K0 J0 V0”. Each time a key is pressed, “K” value increases. However, once a key is pressed, it is no longer taken into account.
9. To release this mode, press three keys in the same manner as step 2, or disconnect the power cord.

[AMP TEST MODE]

- This mode moves the optical pick-up to the position durable to vibration. Use this mode when returning the set to the customer after repair.

Procedure:

1. Press the I/⏻ key to turn the power ON.
2. Press three keys ■ , DSG , and PLAY MODE/TUNING MODE simultaneously.
3. The display changes a shown below each time BASS/TREBLE key on the remote commander is pressed.



4. The display changes “VOLUME MAX” each time VOLUME + key is pressed and “VOLUME MIN” each time VOLUME – key is pressed.

[DVD SHIP (MECHA) MODE]

- This mode moves the optical pick-up to the position durable to vibration. Use this mode when returning the set to the customer after repair.

Procedure:

1. Press the I/⏻ key to turn the power ON.
2. Press the FUNCTION key to select “DVD”.
3. Press three keys ■ , DSG , and REPEAT/FM MODE simultaneously.
4. The message “LOCK” is displayed on the liquid crystal display and turn the power off automatically, and becomes delivery mode.

[SHIP MODE]

- This mode is used to execute “COLD RESET” and “DVD SHIP (MECHA)” simultaneously.

1. Press the I/⏻ key to turn the power ON.
2. Press the FUNCTION key to select “DVD”.
3. Press three keys ■ , DSG , and CD SYNCHRO simultaneously.
4. The message “LOCK” is displayed on the liquid crystal display and turn the power off automatically, and set is reset, then becomes delivery mode.

[DVD SERVICE MODE]

- This mode allows you to make diagnosis and adjustment easily using the remote commander and monitor TV. The instructions, diagnostic results, etc. are given on the on-screen display (OSD).

Enter the DVD Service Mode

Procedure:

1. Connect a TVmonitor to this set.
2. Press the I/⏻ key to turn the power ON.
3. Press the FUNCTION key to select “DVD”.
4. Press three keys ■ , DSG , and DIRECTION simultaneously.
5. Test mode start and display the menu shown below on the TV screen. (At the bottom of the menu screen, the model name and revision number are displayed)
6. To execute each function, select the desired menu and press its number on the remote commander. To release from this mode, press the I/⏻ key.

```
Test Mode Menu

0. Syscon Diagnosis
1. Drive Auto Adjustment
2. Drive Manual Operation
3. Mecha Aging
4. Emergency History
5. Version Information
6. Video Level Adjustment
                Exit: POWER Key
_
Model   : HCX-1102_xx
Revision: 1.xxx
```

Syscon Diagnosis

The same contents as board detail check by serial interface can be checked from the remote commander.
On the Test Mode Menu screen, press the 10/0 key on the remote commander, and the following Check Menu will be displayed.

```
    ### Syscon Diagnosis ###
           Check Menu
0. Quit
1. All
2. Version
3. Peripheral
4. Servo
5. Supply
6. AV Decoder
7. Video
8. Audio
_
```

0. Quit

Quit the Syscon Diagnosis and return to the Test Mode Menu.

1. All

This menu checks all diagnostic items continuously. Normally, all items are checked successively one after another automatically unless an error is found, but at a certain item that requires judgment through a visual check to the result, the following screen is displayed for the key entry.

```
    ### Syscon Diagnosis ###

Diag All Check
No. 2 Version

 2-2. Revision
ROM Revision = 1070


Press NEXT Key to Continue
Press PREV Key to Repeat
_
```

For the ROM Check, the check sum calculated by the syscon is output, and therefore you must compare it with the specified value for confirmation. Following the message, press the DVD ▶▶I key to go to the next item, or the DVD I◀◀ key to repeat the same check again. To quit the Syscon Diagnosis and return to the Check Menu screen, press the DVD ■ or the ENTER keyon the remote commander. If an error occurred, the diagnosis is suspended and the error code is displayed as shown below.

```
    ### Syscon Diagnosis ###




 3-2. EEPROM Check
Error 03: EEPROM Write/Reed N
Address    : 00000001
Write Data : 2492
Read Data  : 2490
Press NEXT Key to Continue
Press PREV Key to Repeat
_
```

Selecting 2 and subsequent items calls the submenu screen of each item. For example, if “5. Supply” is selected, the following submenu will be displayed.

```
    ### Syscon Diagnosis ###
           Check Menu
         No. 5 Supply
0. Quit
1. All
2. ARP Register Check
3. ARP to RAM Data Bus
4. ARP to RAM Address Bus
5. ARP RAM Check
_
```

2. Version

(2-2) Revision
ROM revision number is displayed.
Error: Not detected.
The revision number defined in the source file of ROM (IC108) is displayed with four digits.

(2-3) ROM Check Sum
Check sum is calculated.
Error: Not detected.
The 8-bit data are added at addresses 0x000F0000 to 0x002EFFFF of ROM (IC108) and the result is displayed with 4-digit hexadecimal number. Compare the result with the specified value.

(2-4) Model Type
Model code is displayed.
Error: Not detected.
The model code read from EEPROM (IC101) is displayed with 2-digit hexadecimal number.

(2-5) Region
Region code is displayed.
Error: Not detected.
The region code determined from the model code is displayed.

3. Peripheral

(3-2) EEPROM Check
Data write → read, and accord check
Error 03: EEPROM write/read discord
Data 0x9249, 0x2942, 0x4294 are written to addresses 0x00~0xFF of EEPROM (IC101), then read and checked. Before writing, the data are saved, then after checking, they are written to restore the contents of EEPROM.

4. Servo

(4-2) Servo DSP Check
Data write → read, and accord check
Error 12: Read data discord
Data 0x9249, 0x2942, 0x4294 are written to the address 0x602 of RAM in the servo DSP (IC302), then read and checked.

(4-3) DSP Driver Test
Test signal data → DSP driver
Error: Not detected.
Caution: Do not conduct this test with a mechanical deck connected.
The maximum voltage is applied to the servo driver IC (IC401). If mechanical deck is connected, the motor and optical pick-up could be damaged. Disconnect mechanical deck following the output message, then enter specified 4- or 5-digit number from the remote commander, and press the [ENTER] on the remote commander. The test is conducted only when the input data accord. Check the output level, then press the [DVD ▶▶|] on the remote commander to finish the test. This test is skipped if "All" is selected.

Supplement: How to disconnect mechanical deck
Disconnect flat cables connected to the CN009 and CN010 of DVD board. Also, disconnect harness from the CN402.

5. Supply

Caution: Do not conduct this check with a mechanical deck connected.
An access is made to the stream supply and servo control IC (IC302) and external RAM (IC303) using check data. If mechanical deck is connected, the motor and optical pick-up could be damaged. This check is also executed by the "All" menu item.

Supplement: How to disconnect mechanical deck
Disconnect flat cables connected to the CN009 and CN010 of DVD board. Also, disconnect harness from the CN402.

(5-2) ARP Register Check
Data write → read, and accord check
Error 08: ARP register write, and read data discord
Data 0x00 to 0xFF are written to the TMAX register (address 0xC6) in ARP (IC302), then they are read and checked.

(5-3) ARP to RAM Data Bus
Data write → read, and accord check
Error 09: ARP ↔ RAM data bus error
Data 0x0001 to 0x8000 where one bit each is set to 1 are written to the address 0 of RAM (IC303) connected to the ARP (IC302) through the bus, then they are read and checked. In case of discord, written bit pattern and read data are displayed. If data where multiple bits are 1 are read, the bits concerned may touch each other. Further, if data where certain bit is always 1 or 0 regardless of written data, the line could be disconnected or shorted.

(5-4) ARP to RAM Address Bus
Data write → other address read discord check
Error 10: ARP ↔ RAM address bus error
Caution: Address and data display in case of an error is different from the display of other diagnosis (described later).
Before starting the test, all addresses of RAM (IC303) are cleared to 0x0000. First, 0xA55A is written to the address 0x00000, and the address data are read and checked from addresses 0x00001 to 0x80000 while shifting 1 bit each. Next, the data at that address is cleared, and it is written to the address 0x00001, and read and checked in the same manner. This check is repeated up to the address 0x80000 while shifting the address data by 1 bit each. If data other than 0 is read at the addresses except written address, an error is given because all addresses were already cleared to 0. In this check, the error display pattern is different from that of other diagnosis; read data, written address, and read address are displayed in this order. However, the message uses same template, and accordingly exchange Address and Data when reading. The following display, for example,

```
    ### Syscon Diagnosis ###




 5-4. ARP to RAM Address Bus
Error 10: ARP - RAM Address B
Address    : 0000A55A
Write Data : 00000000
Read Data  : 00080000
Press NEXT Key to Continue
Press PREV Key to Repeat
_
```

shows the data 0xA55A was read from address 0x00080000 though it was written to the address 0x00000000. This implies that these addresses are in the form of shadow. Also, if the read data is not 0xA55A, another error will be present.

(5-5) ARP RAM Check
Data write → read, and accord check
Error 11: ARP RAM read data discord
The program code data stored in ROM are copied to all areas of RAM (IC303) connected to the ARP (IC302) through the bus, then they are read and checked if they accord. If the detail check was selected initially, the data are written to all areas and read, then the same test is conducted once again with the data where all bits are inverted between 1 and 0. If discord is detected, faulty address, written data, and read data are displayed following the error code 11, and the test is suspended.

6. AV Decoder

(6-2) 1930 RAM
Data write → read, and accord check
Error 13: AVD RAM read data discord
The program code data stored in ROM (IC108) are copied to all areas of RAM (IC504, IC505) connected to the AV decoder (IC503) through the bus, then they are read and checked if they accord. Further, the same test is conducted once again with the data where all bits are inverted between 1 and 0. If discord is detected, faulty address, written data, and read data are displayed following the error code 13, and the test is suspended.

(6-3) 1930 SP
ROM → AVD RAM → Video OUT
Error: Not detected.
The data including sub picture streams in ROM (IC108) are transferred to the RAM (IC504, IC505) in AV decoder (IC503), and output as video signals from the AV decoder (IC503). They are output from all video terminals (Composite, Y/C).

7. Video

(7-2) Color Bar
AVD color bar command write → Video OUT
Error: Not detected.
The command is transferred to the AVD, and the color bar signals are output from video terminals. They are output from all video terminals (Composite, Y/C).

(7-3) Composit Out

(7-4) Y/C Out

(7-6) Component Out

8. Audio

(8-2) ARP –> 1930
Error 14: ARP → 1930 video NG
15: ARP → 1930 audio NG

(8-3) Test Tone
All channels
2ch Left
2ch Right
Front Left
Front Right
Rear Left
Rear Right
Center
Sub Woofer

Check Items List

2. Version
(2-2) Revision
(2-3) ROM Check Sum
(2-4) Model Type
(2-5) Region

3. Peripheral
(3-2) EEPROM Check

4. Servo
(4-2) Servo DSP Check
(4-3) DSP Driver Test

5. Supply
(5-2) ARP Register Check
(5-3) ARP to RAM Data Bus
(5-4) ARP to RAM Address Bus
(5-5) ARP RAM Check

6. AV Decoder
(6-2) 1930 RAM
(6-3) 1930 SP

7. Video
(7-2) Color Bar
(7-3) Composit Out
(7-4) Y/C Out
(7-6) Component Out

8. Audio
(8-2) ARP –> 1930
(8-3) Test Tone

Error Codes List

00: Error not detected
01: RAM write/read data discord
02: Gate array NG
03: EEPROM NG
08: ARP register read data discord
09: ARP ↔ RAM data bus error
10: ARP ↔ RAM address bus error
11: ARP RAM read data discord
12: Servo DSP NG
13: 1930 SDRAM NG
14: ARP → 1930 video NG
15: ARP → 1930 audio NG
16: 1910 UCODE download NG
17: System call error (function not supported)
18: System call error (parameter error)
19: System call error (illegal ID number)
20: System call error (time out)
90: Error occurred
91: User verification NG
92: Diagnosis cancelled

Drive Auto Adjustment

On the Test Mode Menu screen, press the [1] key on the remote commander, and the drive auto adjustment menu will be displayed.

```
   ## Drive Auto Adjustment ##

         Adjustment Menu

0. ALL
1. DVD-SL
2. CD
3. DVD-DL
4. LCD



                    Exit: RETURN
```

Normally, “0” is selected to adjust DVD (single layer), CD, and DVD (dual layer) in this order. But, individual items can be adjusted for the case where adjustment is suspended due to an error. In this mode, the adjustment can be made easily through the operation following the message displayed on the screen.

0. ALL

Press the [10/0] key on the remote commander, then press the [ENTER] key on the remote commander, and the servo set data in EEPROM will be initialized. Then, 1. DVD-SL disc, 2. CD disc, 3. DVD-DL disc, and 3. DVD-DL disc are adjusted in this order. Each time one disc was adjusted, it is ejected. Replace it with the specified disc following the message. Though the message to confirm whether are adjusted is not displayed, you can finish the adjustment if pressing the [DVD ■] key on the remote commander. During adjustment of each disc, the measurement for disc type judgment is made. As automatic adjustment does not judge the disc type unlike conventional models, take care not to insert wrong type discs. Also, do not give a shock during adjustment.

1. DVD-SL (single layer)

Press the [1] key on the remote commander, insert DVD single layer disc, and press [ENTER] key on the remote commander, and the adjustment will be made through the following steps, then adjusted values will be written to the EEPROM.

DVD Single Layer Disc Adjustment Steps

1. SLED TILT Reset
2. Disc Check Memory SL
3. Wait 300 msec
4. Set Disc Type SL
5. LD ON
6. Spdl Start
7. Wait 1 sec
8. Focus Servo ON 0
9. Auto Track Offset Adjust
10. CLVA ON
11. Wait 500 msec
12. Tracking ON
13. Wait 1 sec
14. Sled ON
15. Check CLV Lock
16. Auto LFO Adjust
17. Auto Focus Offset Adjust
18. Auto Tilt Position Adjust
19. Auto Focus Gain Adjust
20. Auto Focus Offset Adjust
21. EQ Boost Adjust
22. Auto LFO Adjust
23. Auto Track Gain Adjust, Search Check
24. 32Tj Fwd
25. 32Tj Rev
26. 500Tj Fwd
27. 500Tj Rev

28. All Servo Stop
29. Eep Copy Loop Filter Offset

2. CD

Press the [2] key on the remote commander, insert CD disc, and press [ENTER] key on the remote commander, and the adjustment will be made through the following steps, then adjusted values will be written to the EEPROM.

CD Adjustment Steps

1. Sled Tilt Rest
2. Disc Check Memory CD
3. Wait 500 msec
4. Set Disc Type CD
5. LD ON
6. Spdl Start
7. Wait 500 msec
8. Focus Servo ON 0
9. Auto Track Offset Adjust

10. CLVA ON
11. Wait 500 msec
12. Tracking ON
13. (TC Display Start)
14. Wait 1 sec
15. Jitter Display Start
16. Sled ON
17. Check CLV ON
18. Auto LFO Adjust
19. Auto Focus Offset Adjust
20.
21. Auto Focus Gain Adjust
22. Auto Focus Offset Adjust
23. Eq Boost Adjust
24. Auto LFO Adjust
25. Auto Track Gain Adjust, Search Check
26. 32Tj Fwd
27. 32Tj Rev
28. 500Tj Fwd
29. 500Tj Rev

30. All Servo Stop

3. DVD-DL (dual layer)

Press the [3] key on the remote commander, insert DVD dual layer disc, and press [ENTER] key on the remote commander, and the adjustment will be made through the following steps, then adjusted values will be written to the EEPROM.

DVD Dual Layer Disc Adjustment Steps

1. Sled Tilt Reset
2. Disc Check Memory DL
3. Wait 500 msec
4. Set Disc Type DL
5. LD ON
6. Spdl Start
7. Wait 1 sec, Layer 1 Adjust
8. Focus Servo ON 0
9. Auto Track Offset Adjust

10. Clva ON
11. Wait 500 msec
12. Tracking ON
13. Wait 500 msec
14. Sled ON
15. Check CLV Lock
16. Auto Loop Filter Offset Auto Focus Adjust
17.
18. Auto Focus Gain Adjust
19. Auto Focus Offset Adjust
20. Eq Boost Adjust
21. Auto Loop Filter Offset
22. Auto Track Gain Adjust, Search Check
23. 32Tj Fwd
24. 32Tj Rev
25. 500Tj Fwd
26. 500Tj Rev, Layer 0 Adjust
27. Fj (L1 -> L0)
28. Auto Track Offset Adjust L0

29. Clva ON
30. Wait 500 msec
31. Tracking ON
32. Wait 500 msec
33. Sled ON
34. Check CLV Lock
35. Auto Focus Filter Offset
36. Auto Focus Adjust
37.
38. Auto Focus Gain Adjust
39. Auto Focus Offset Adjust
40. Eq Boost Adjust
41. Auto Loop Filter Offset
42. Auto Track Gain Adjust, Search Check
43. 32Tj Fwd
44. 32Tj Rev
45. 500Tj fwd
46. 500Tj Rev, Layer Jump Check
47. Lj (L0 -> L1)
48. Lj (L1 -> L0)

49. All Servo Stop

Drive Manual Operation

On the Test Mode Menu screen, Press the [2] key on the remote commander, and the manual operation menu will be displayed. For the manual operation, each servo on/off control and adjustment can be executed manually.

```
  ## Drive Manual Operation ##

         Operation Menu
1. Disc Type
2. Servo Control
3. Track/Layer Jump
4. Manual Adjustment
5. Auto Adjustment
6. Memory Check
7. Sacd Water Mark

0. Disc Check Memory
_
                    Exit: Return
```

In using the manual operation menu, take care of the following points. These commands do not provide protection, thus requiring correct operation. The sector address or time code field is displayed when a disc is loaded.

1. Set correctly the disc type to be used on the Disc Type screen. The disc type must be set after a disc was loaded. The set disc type is cleared when the tray is opened.
2. After power ON, if the Drive Manual Operation was selected, first perform “Reset SLED TILT” by opening 1. Disc Type screen.
3. In case of an alarm, immediately press the [DVD ■] key on the remote commander to stop the servo operation, and turn the power OFF.

Basic operation (controllable from front panel or remote commander)

[I/⏻]	Power OFF
[DVD ■]	Servo stop
[⏏ DVD] *1	Stop+Eject/Loading
[RETURN] *2	Return to Operation Menu or Test Mode Menu
[DVD ▶▶I], [DVD I◀◀] *2	Transition between sub modes of menu
[1] to [9], [10/0] *2	Selection of menu items
[↑], [↓] *2	Increase/Decrease in manually adjusted value

*1: Key of front panel
*2: Key of remote commander

0. Disc Check Memory

```
          Disc Check



1. SL Disc Check
2. CD Disc Check
3. DL Disc Check



0. Reset SLED TILT
_
```

On this screen, the mirror time is measured to judge the disc and it is written to the EEPROM. First load DVD SL disc and press [1] key on the remote commander, next load CD disc and press [2] key on the remote commander, and finally load DVD DL disc and press [3] key on the remote commander. The adjustment must be executed more than once after default data were written. External vibration or shock to the player must not be given. Reference value for DVD is from 10 to 20, and for CD, from 28 to 4F. Check that the value of CD is larger than that of DVD. When those values are beyond a range perform this adjustment again. From this screen, you can go to another mode by pressing [DVD ▶▶I] or [DVD I◀◀] key on the remote commander, but you cannot enter this mode from another mode. You can enter this mode from the Operation Menu screen only.

1. Disc Type

```
          Disc Type
1. Disc Type Auto Check
2. DVD SL   12 cm
3. DVD DL   12 cm
4. CD       12cm
5. LCD      12 cm
6. DVD SL   8 cm
7. DVD DL   8 cm
8. CD       8 cm
9. LCD      8 cm
0. Reset SLED TILT
-- SA. ------ SI. --    EMG. 00
DVD SL12cm
```

On this screen, select the disc type. To select the disc type, press the number of the loaded disc. The selected disc type is displayed at the bottom. Pressing [1] key on the remote commander automatically selects and displays the disc type. In case of wrong display, retry "Disc Check Memory". Also, opening the tray causes the set disc type to be cleared. In this case, set the disc type again after loading. In performing manual operation, the disc type must be set. Once the disc type has been selected, the sector address or time code display field will appear as shown below. These values are displayed when PLL is locked.

```
          Disc Type
1. Disc Type Auto Check
2. DVD SL   12 cm
3. DVD DL   12 cm
4. CD       12cm
5. LCD      12 cm
6. DVD SL   8 cm
7. DVD DL   8 cm
8. CD       8 cm
9. LCD      8 cm
0. Reset SLED TILT
       SA.      SI.    EMG. 00
DVD SL 12 cm
```

Display when DVD SL 12cm disc was selected

```
          Disc Type
1. Disc Type Auto Check
2. DVD SL   12 cm
3. DVD DL   12 cm
4. CD       12cm
5. LCD      12 cm
6. DVD SL   8 cm
7. DVD DL   8 cm
8. CD       8 cm
9. LCD      8 cm
0. Reset SLED TILT
        TC.   :   :    EMG. 00
CD   12 cm
```

Display when CD 12cm disc was selected

[10/0] Reset SLED TILT	Reset the sled and tilt to initial position.
[1] Disk Type Check	Judge automatically the loaded disc. As the judged result is displayed at the bottom of screen, make sure that it is correct. If Disc Check Memory menu has not been executed after EEPROM default setting, the disc type cannot be judged. In this case, return to the initial menu and make a check for three types of discs (SL, DL, CD).
[2] to [9]	Select the loaded disc. The adjusted value is written to the address of selected disc. No further entry is necessary if [1] was pressed.

2. Servo Control

```
         Servo Control
1. LD         Off R.Sled FWD
2. SP         Off L.Sled REV
3. Focus      Off
4. TRK.       Off
5. Sled       Off
6. CLVA       Off
7. FCS. Srch Off


0. Reset SLED TILT
       SA.      SI.    EMG. 00
DVD SL 12 cm
```

On this screen, the servo on/off control necessary for replay is executed. Normally, turn on each servo from 1 sequentially and when CLVA is turned on, the usual trace mode becomes active. In the trace mode, DVD sector address or CD time code is displayed. This is not displayed where the spindle is not locked. The spindle could run overriding the control if the spindle system is faulty or RF is not present. In such a case, do not operate CLVA.

[0] Reset SLED TILT	Reset the Sled and Tilt to initial position.
[1] LD	Turn ON/OFF the laser.
[2] SP	Turn ON/OFF the spindle.
[3] Focus	Search the focus and turn on the focus.
[4] TRK	Turn ON/OFF the tracking servo.
[5] Sled	Turn ON/OFF the sled servo.
[6] CLVA	Turn ON/OFF normal servo of spindle servo.
[7] FCS. Srch	Apply same voltage as that of focus search to the focus drive to check the focus drive system.
[→] Sled FWD	Move the sled outward. Perform this operation with the tracking servo turned off.
[←] Sled REV	Move the sled inward. Perform this operation with the tracking servo turned off.

The following menus are normally not used.

3. Track/Layer Jump

4. Manual Adjustment

5. Auto Adjustment

The persons who do not know well about these menus should not use them.

6. Memory Check

```
EEPROM Data1
                    -- DL --
               CD LCD   SL  L0  L1
Focus Gain     xx xx    xx  xx  xx
TRK. Gain      xx xx    xx  xx  xx
FCS Balance    xx xx    xx  xx  xx
Focus Bias     xx xx    xx  xx  xx
TRV. Offset    xx xx    xx  xx  xx
L. F. Offset   xx xx    xx  xx  xx
EQ Boost       xx xx    xx  xx  xx
Mirror Time    xx xx    xx  xx  xx
_DOWN: Next Data
CLEAR: Default Set      page.1/2
```

```
EEPROM Data1
                    -- DL --
               CD LCD   SL  L0  L1
RF Jitter      xx --    xx  xx  xx
RF Level       xx --    xx  --  --
FE Level       xx --    xx  --  --
FE Balance     xx --    xx  --  --
TRV. Level     xx --    xx  --  --
Analog FRSW    xx xx    xx  xx  xx
PLL DacGain    xx xx    xx  xx  xx
_
 UP   : Prev Data
CLEAR: Default Set      page.2/2
```

This screen displays current servo adjusted data stored in the EEPROM. Though adjusted data can be initialized with the [CLEAR] key on the remote commander, they cannot be restored after initialization. So, before clearing, make a note of the adjusted data. For reference, the drive has been designed so that the gain center value is 20 and offset value is 80. Other values will be in a range of 10 to 80. If extreme value such as 00 or FF is set, adjustment will be faulty. In such a case, check for disc scratch or cable disconnection, then perform adjustment again.

Emergency History

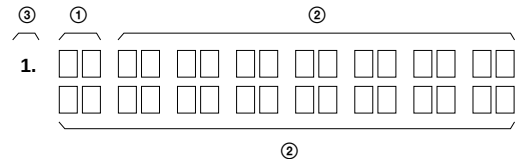
```
      ### EMG. History ###

Laser Hours      CD xxxxxxxh
                 DVD xxxxxxxh
1.  00 00 00 00 00 00 00 00
    00 00 00 00 00 00 00 00

2.  00 00 00 00 00 00 00 00
    00 00 00 00 00 00 00 00

Select: 1 – 9 Scroll: UP/DOWN
(1: Last EMG.) Exit: RETURN
```

Press the [4] key on the remote commander of the emergency history mode to display the servo error occurrence history. Press the [↑] or [↓] keys on the remote commander to scroll the history data in the range of the most recent error “1” to the error “10”. You can also type the desired error number from the ten-keys on the remote commander. The upper two columns show the accumulated turn-on hours of the optical laser unit. The “minute” and the lower data are truncated.

Clearing the Error Histories

- Clearing the laser turn-on hours data
  Press the [DVD DISPLAY] and [CLEAR] keys on the remote commander in this order. Both of the CD laser data and DVD laser data are cleared.
- Clearing the error occurrence history data
  Press the [DVD TOP MENU] and [CLEAR] keys on the remote commander in this order.
- Initializing the setups
  Press the [DVD MENU] and [CLEAR] keys on the remote commander in this order. When the message “Set Up Initialized” is displayed, it indicates that the setups are initialized. The screen returns to the EMG display screen soon.

How to Read the Eror Occurrence History Data



① Emergency code No.
② Not used (The codes that are used for debugging during program design are displayed here. They are not related to the error occ urrence history.)
③ Order of error occurrence (1 to 9)

Emergency Code Table

10. Communication error with RF AMP (IC001) on the RF-240 board.
11. Servo lock of focus, tracking and spindle servos are lost.
12. Communication error with EEPROM (IC101) on the DVD board.
13. Hours meter data write error in EEPROM (IC101) on the DVD board.
14. Communication error with servo DSP (IC302) on the DVD board or defective servo DSP
20. Tilt and sled servo initializing error. The laser unit does not return to the initial position.
21. Tilt servo operation error.
22. The move request to illegal position is issued from system control to the tilt servo.
23. Error in the tracking balance gain adjustment.
24. The move request to illegal position is issued from system control to the sled servo.
30. Error in the tracking balance adjustment.
31. Error in the tracking gain adjustment.
32. Error in the focus balance adjustment.
33. Error in the focus bias adjustment.
34. Error in the focus gain adjustment.
35. Error in the tilt servo adjustment.
36. Error in the RF equalizer adjustment.
37. Error in the RF group delay adjustment
38. Amount of jitter upon completion of adaptation adjustment is excessive.
40. Focus servo does not lock.
41. Focus jump is not possible with the dual layer (DL) disc.
50. CLV (spindle) servo does not lock.
51. Spindle does not stop.
60. The seek request to the non-existent address is issued from system control using the DVD disc.

[DVD TRAY LOCK MODE]

• This mode is used to unable to take sample disc out of tray in the shop.

Procedure:

1. Press the I/⏻ key to turn the power ON.
2. Press the FUNCTION key to select “DVD”.
3. While pressing the ■ key, press the ⏏ DVD key.
4. The message “LOCKED” is displayed on the liquid crystal display and the tray is locked. (Even if pressing the ⏏ DVD key, the message “LOCKED” is displayed on the liquid crystal display and the tray is locked)
6. To release from this mode, while pressing the ■ key, press the ⏏ DVD key again.
7. The message “UNLOCKED” is displayed on the liquid crystal display and the tray is unlocked.

[DVD COLOR SYSTEM NTSC]

• The color system can be changed over NTSC or PAL.

Procedure:

1. Press the I/⏻ key to turn the power ON.
2. Press the FUNCTION key to select “DVD”.
3. While pressing the ■ key, press the I/⏻ key.
4. Press the I/⏻ key to turn the power ON. The color system is changed over.

[TUNER STEP CHANGE]

• A step of AM channels can be changed over between 9 kHz and 10 kHz.

Procedure:

1. Press the I/⏻ key to turn the power ON.
2. Press the FUCTION key to select “TUNER” and press the TUNER AM key to turn the “AM”.
3. Press the I/⏻ key to turn the set OFF.
4. While pressing REPEAT/FM MODE key, and press the I/⏻ key and the display of liquid crystal display changes to “AM 9K Step” or “AM 10K Step”, and thus the channel step is changed over.

SECTION 5
ELECTRICAL ADJUSTMENTS

DVD SECTION

Note: During diagnostic check, the characters and color bars can be seen only with the NTSC monitor. Therefore, for diagnostic check, use the monitor that supports both NTSC and PAL modes

Instruments required:

1) Color monitor TV
2) Oscilloscope 1 or 2 phenomena, band width over 100 MHz, with delay mode
3) DVD reference disc
   HLX-501 (J-6090-071-A) (dual layer) (NTSC)
   HLX-503 (J-6090-069-A) (single layer) (NTSC)
   HLX-504 (J-6090-088-A) (single layer) (NTSC)
   HLX-505 (J-6090-089-A) (dual layer) (NTSC)
   HLX-506 (J-6090-077-A) (single layer) (PAL)
   HLX-507 (J-6090-078-A) (dual layer) (PAL)

VIDEO LEVEL ADJUSTMENT

<Purpose>

This adjustment is made to satisfy the NTSC/PAL standard, and if not adjusted correctly, the brightness will be too large or small.

Signal	Color bars
Test point	VIDEO OUT jack (75 Ω terminated)
Instrument	Oscilloscope
Adjusting element	RV501 (DVD board)
Specified Value	$1.0\ ^{+0.04}_{-0.02}$ Vp-p

Procedure:

1. Press the I/⏻ key to turn the power on, and turn the FUNCTION key to select "DVD".
2. Adjust the RV501 on the MB board to attain $1.0\ ^{+0.04}_{-0.02}$ Vp-p.

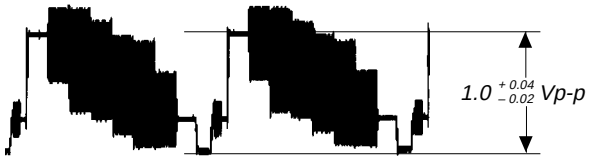


Figure 5-1

CHECKING S VIDEO OUTPUT S-Y

<Purpose>

Check S-terminal video output. If it is incorrect, pictures will not be displayed correctly in spite of connection to the TV with a S-terminal cable.

Signal	Color bars
Test point	S VIDEO OUT (S-Y) jack (75 Ω terminated)
Instrument	Oscilloscope
Specified Value	1.0 ± 0.05 Vp-p

Procedure:

1. Press the I/⏻ key to turn the power ON, and turn the FUNCTION key to select "DVD".
2. Confirm that the S-Y level is 1.0 ± 0.05 Vp-p.

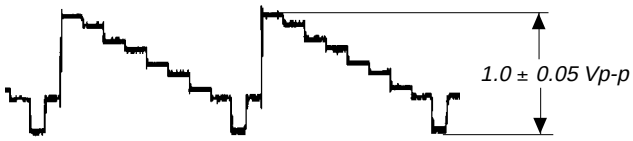


Figure 5-2

CHECKING S VIDEO OUTPUT S-C

<Purpose>

This checks whether the S-C satisfies the NTSC Standard. If it is not correct, the colors will be too dark or light.

Signal	Color bars
Test point	S VIDEO OUT (S-C) jack (75 Ω terminated)
Instrument	Oscilloscope
Specified Value	286 ± 30 mVp-p (NTSC) 300 ± 100 mVp-p (PAL)

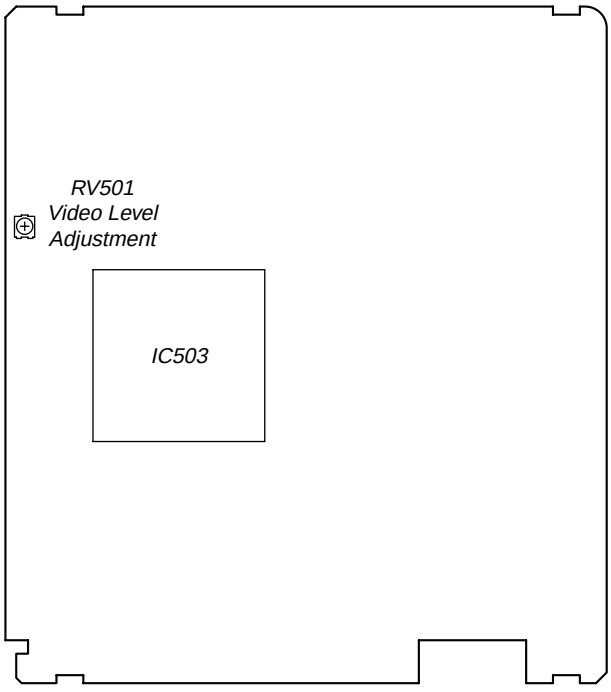
Procedure:

1. Press the I/⏻ key to turn the power ON, and turn the FUNCTION key to select "DVD".
2. Confirm that the S-C burst is 286 ± 30 mVp-p (NTSC) or 300 ± 100 mVp-p (PAL).

Figure 5-3

Adjustment Location :

– DVD BOARD (Side A) –



DECK SECTION

0 dB=0.775 V

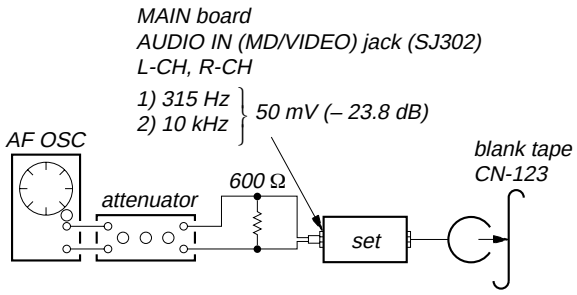
Note: Confirm each contents of this section first of all. If the results are not satisfied, do the adjustment.

1. The adjustments should be performed with the rated power supply voltage unless otherwise noted.
2. The adjustments should be performed in the order given in this service manual.
3. The adjustments should be performed for both L-CH and R-CH.

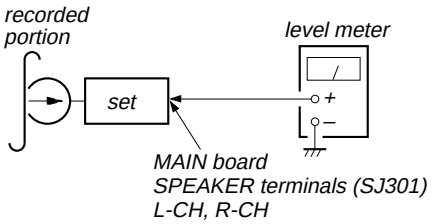
REC BIAS ADJUSTMENT

Procedure:

1. Mode: REC
   FUNCTION: MD



2. Mode: Playback

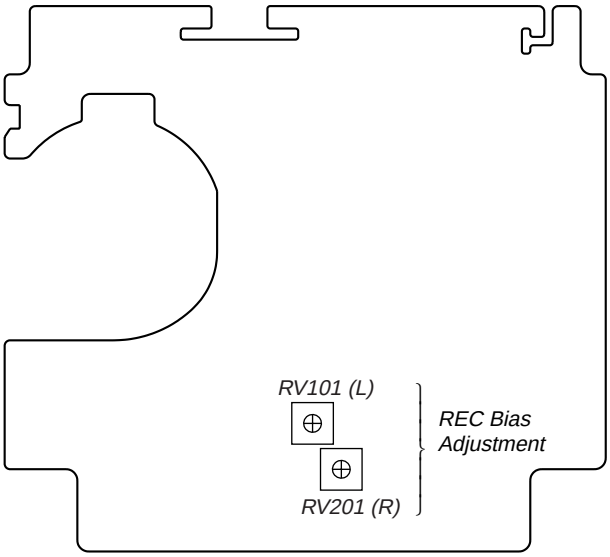


3. Confirm playback the signal recorded in step 1 become specified values as follows.
   If these values are out of specification values, adjust the RV101 (L-CH) and RV201 (R-CH) on the TC board to repeat steps 1and 2.

Specified values: Playback output of 315 Hz to playback output of 10 kHz: ± 0.5 dB

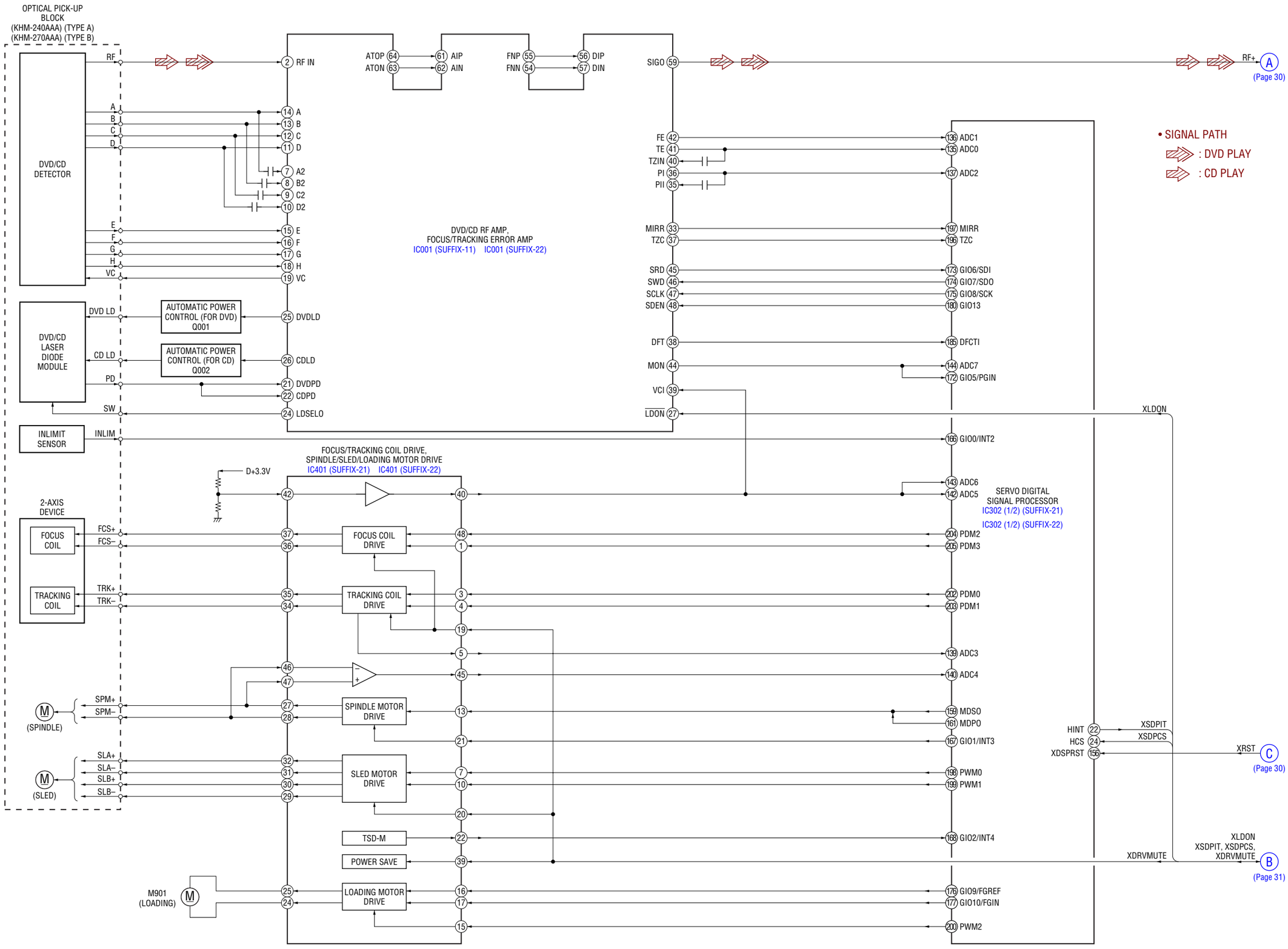
Adjustment Location: TC board

– TC BOARD (Component Side) –

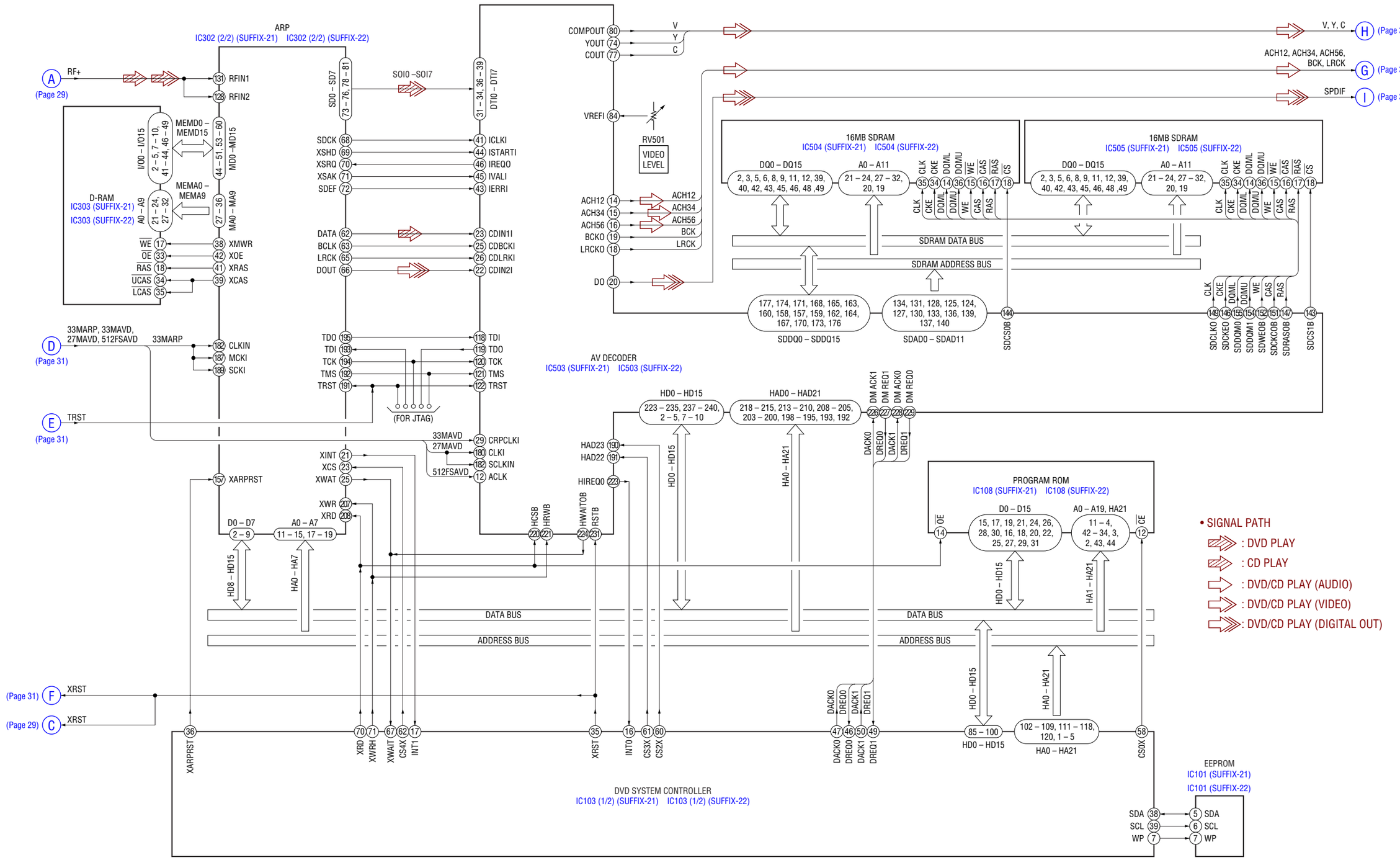


SECTION 6
DIAGRAMS

6-1. BLOCK DIAGRAM – DVD SERVO Section – • Refer to servicing notes (page 6) for discrimination of TYPE A/B.

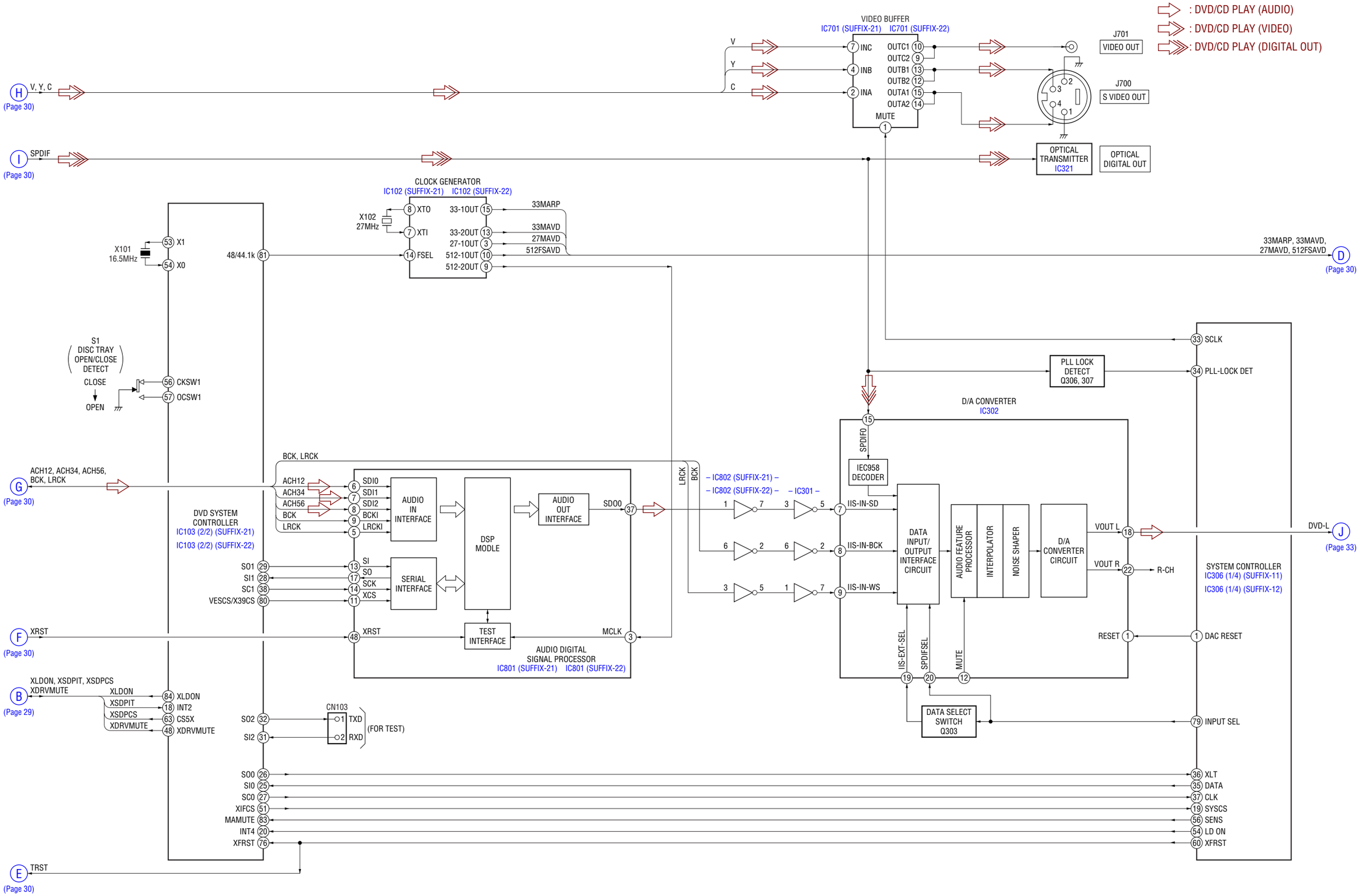


6-2. BLOCK DIAGRAM – DVD MAIN Section (1/2) –

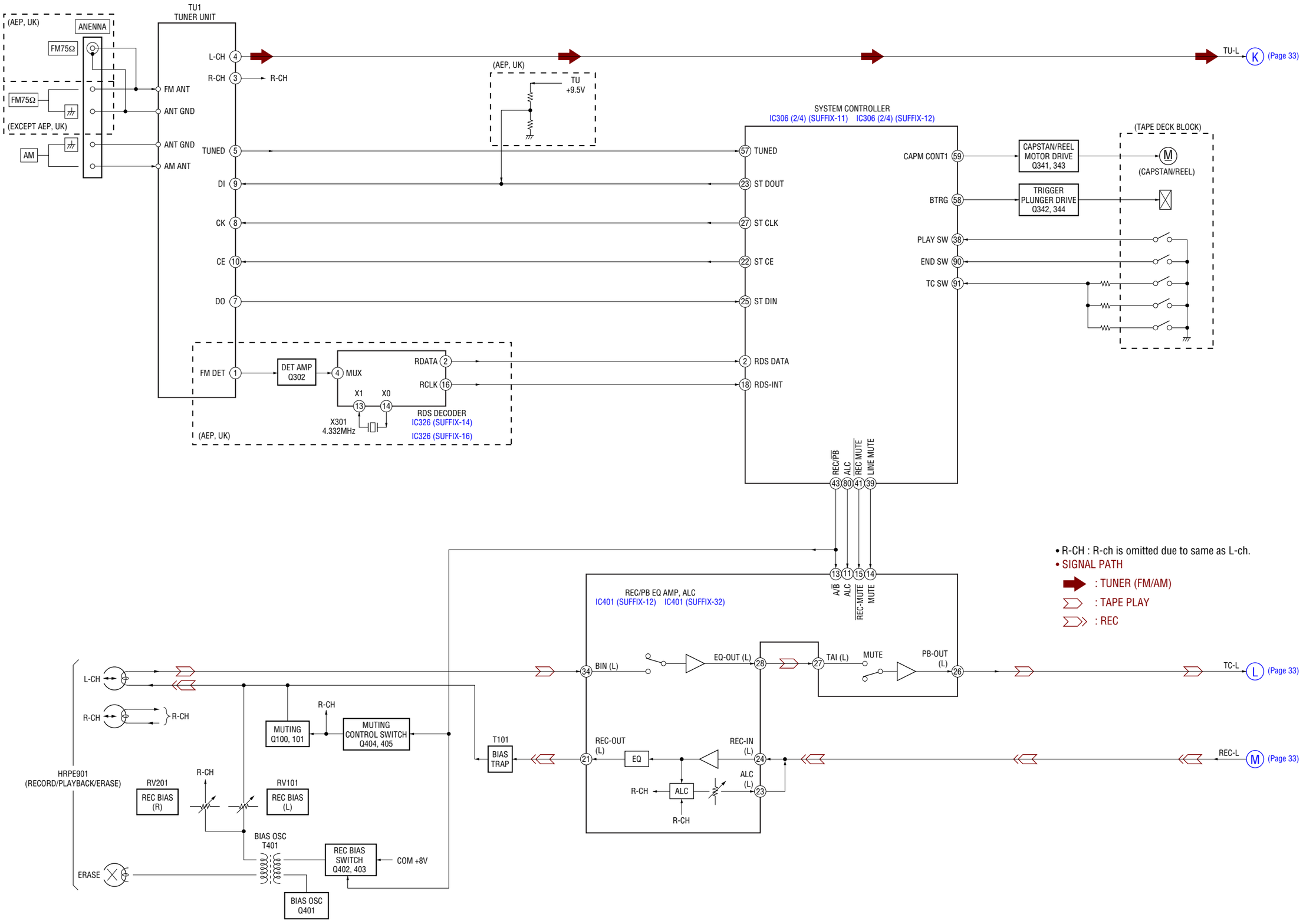


6-3. BLOCK DIAGRAM – DVD MAIN Section (2/2) –

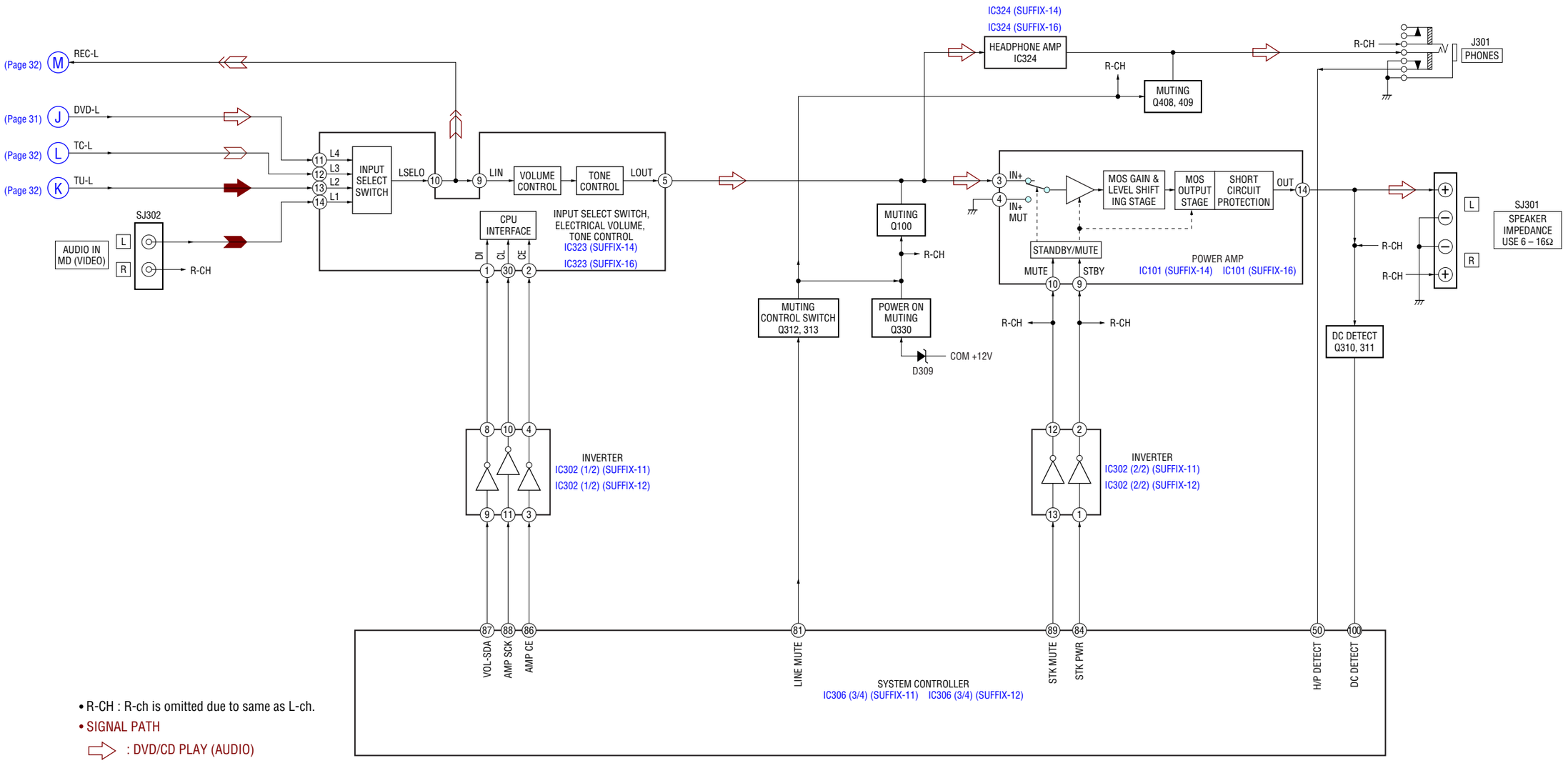
• R-CH : R-ch is omitted due to same as L-ch.
• SIGNAL PATH
: DVD/CD PLAY (AUDIO)
: DVD/CD PLAY (VIDEO)
: DVD/CD PLAY (DIGITAL OUT)



6-4. BLOCK DIAGRAM – TUNER/TAPE DECK Section –

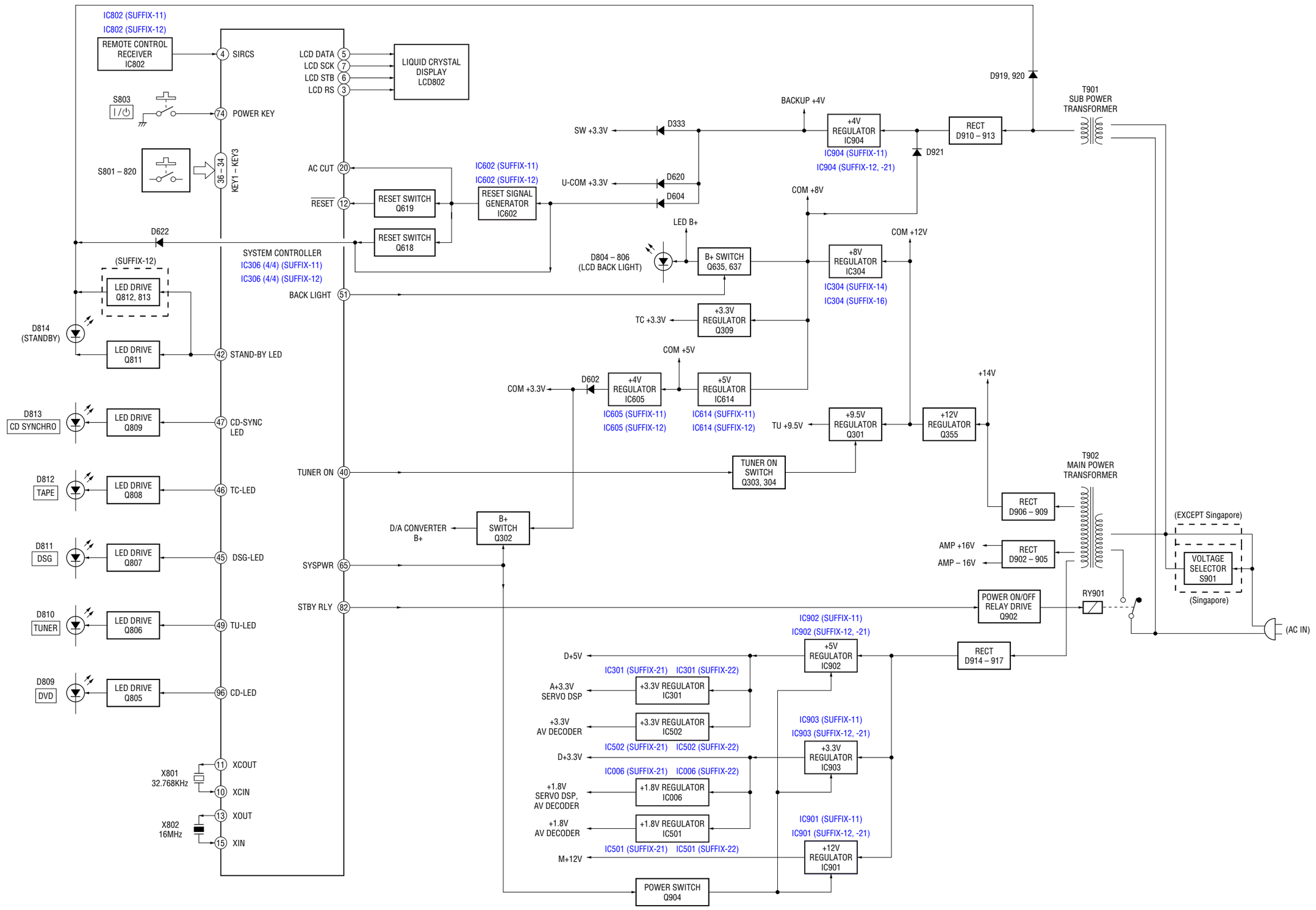


6-5. BLOCK DIAGRAM – AUDIO Section –



- R-CH : R-ch is omitted due to same as L-ch.
- SIGNAL PATH
  - : DVD/CD PLAY (AUDIO)
  - : TUNER (FM/AM)
  - : TAPE PLAY
  - : REC
  - : MD (VIDEO)

6-6. BLOCK DIAGRAM – KEY CONTROL/POWER SUPPLY Section –



6-7. NOTE FOR PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

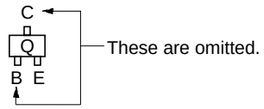
Note on Printed Wiring Boards:

- ○——— : parts extracted from the component side.
- ——— : parts extracted from the conductor side.
- ⬚← : indicates side identified with part number.
- △ : internal component.
- ▬ : Pattern from the side which enables seeing.

(The other layers' patterns are not indicated.)

Caution:	
Pattern face side: (Side B)	Parts on the pattern face side seen from the pattern face are indicated.
Parts face side: (Side A)	Parts on the parts face side seen from the parts face are indicated.

- DVD board is multi-layer board. However, the patterns of intermediate-layer not been included in diagram.
- Indication of transistor.



Note on Schematic Diagram:

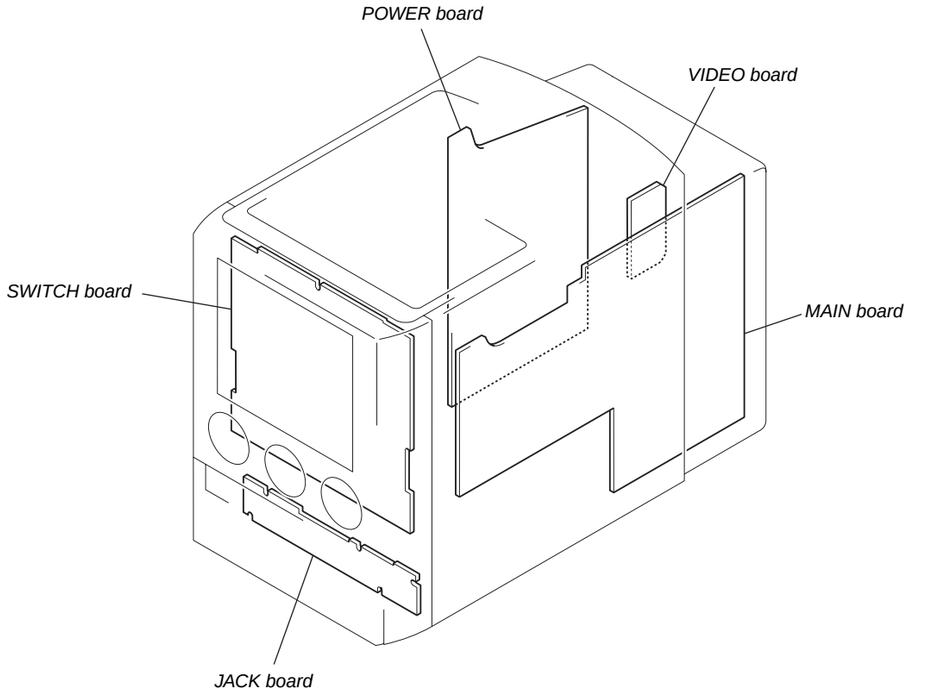
- All capacitors are in μF unless otherwise noted. pF: μμF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and 1/4 W or less unless otherwise specified.
- △ : internal component.
- ▭ : panel designation.

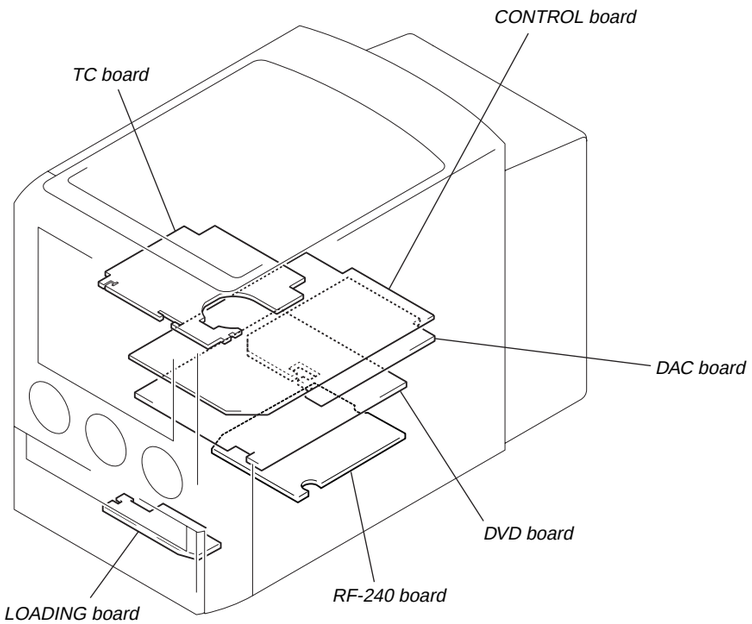
Note:	**Note:**
The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

以阴影和⚠标志来识别的零部件在安全方面具有关键性。因此只能以规定号码的零部件来更换。

- ▬ : B+ Line.
- ▬ ▬ : B– Line.
- ▭ : adjustment for repair.
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Waveforms are taken with a oscilloscope. Voltage variations may be noted due to normal production tolerances.
- Circled numbers refer to waveforms.
- Signal path.
  - : TUNER (FM/AM)
  - : TAPE PLAY
  - : REC
  - : DVD PLAY
  - : CD PLAY
  - : DVD/CD PLAY (AUDIO)
  - : DVD/CD PLAY (VIDEO)
  - : DVD/CD PLAY (DIGITAL OUT)
  - : MD (VIDEO)
- Abbreviation
  - AUS : Australian model
  - CH : Chinese model
  - CND : Canadian model
  - SP : Singapore model

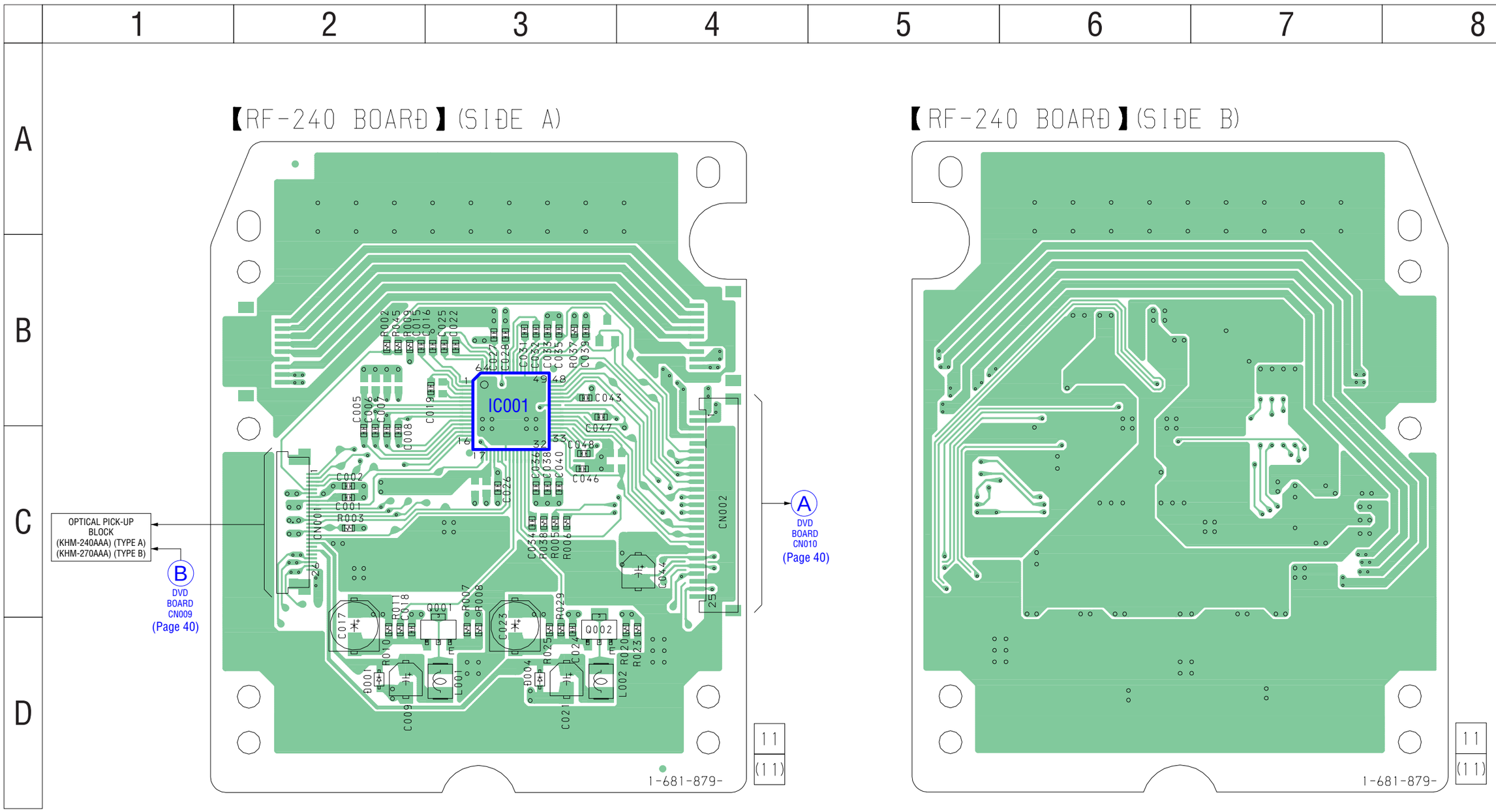
- **Circuit Boards Location**





6-8. PRINTED WIRING BOARD – RF-240 Board (Suffix-11) –

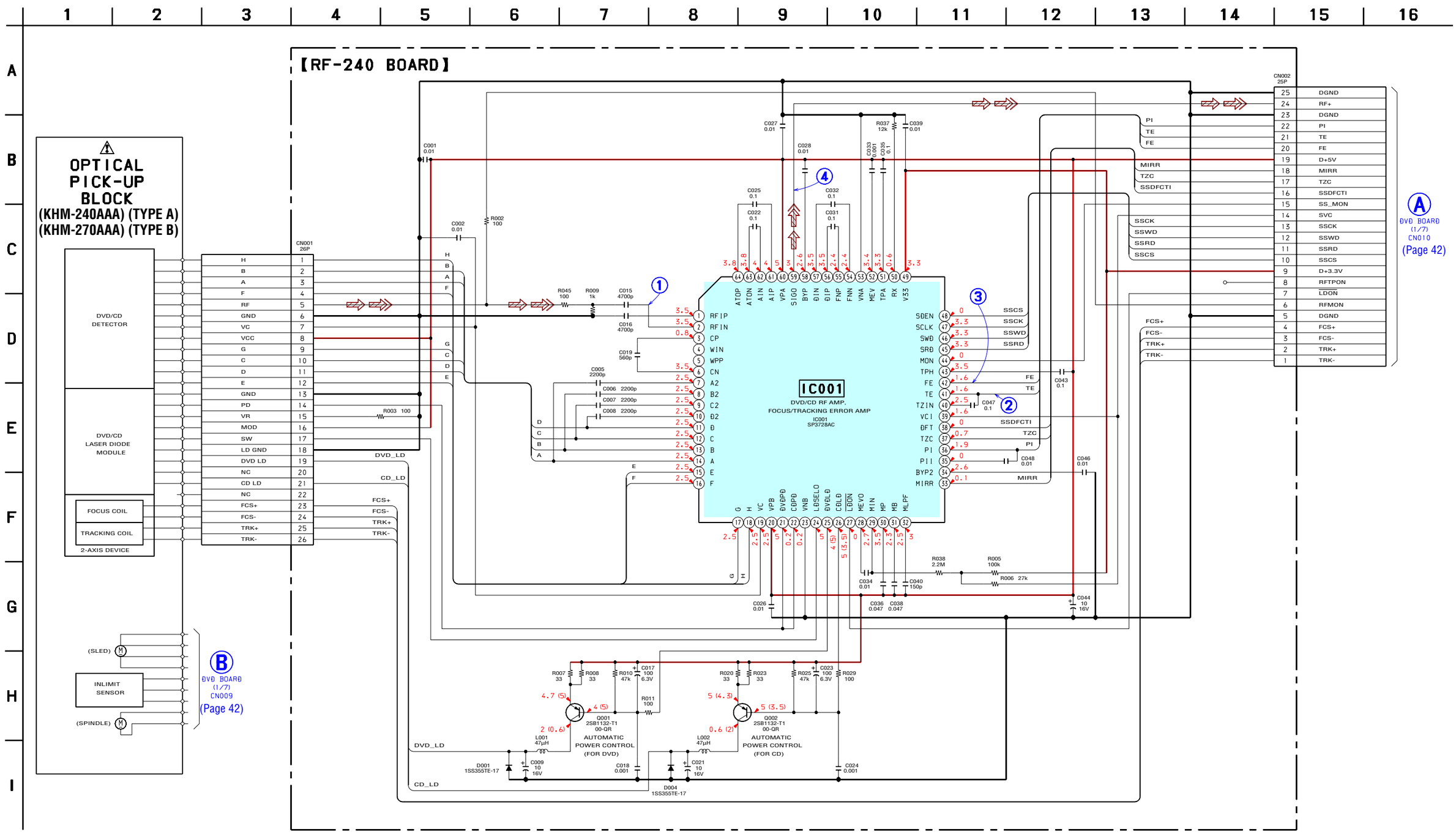
• See page 35 for Circuit Boards Location. • Refer to servicing notes (page 8) for discrimination of TYPE A/B.



- **Semiconductor Location**

Ref. No.	Location
D001	D-2
D004	D-3
IC001	B-3
Q001	D-3
Q002	D-3

6-9. SCHEMATIC DIAGRAM – RF-240 Board (Suffix-11) – • See page 82 for Waveforms. • Refer to servicing notes (page 8) for discrimination of TYPE A/B.

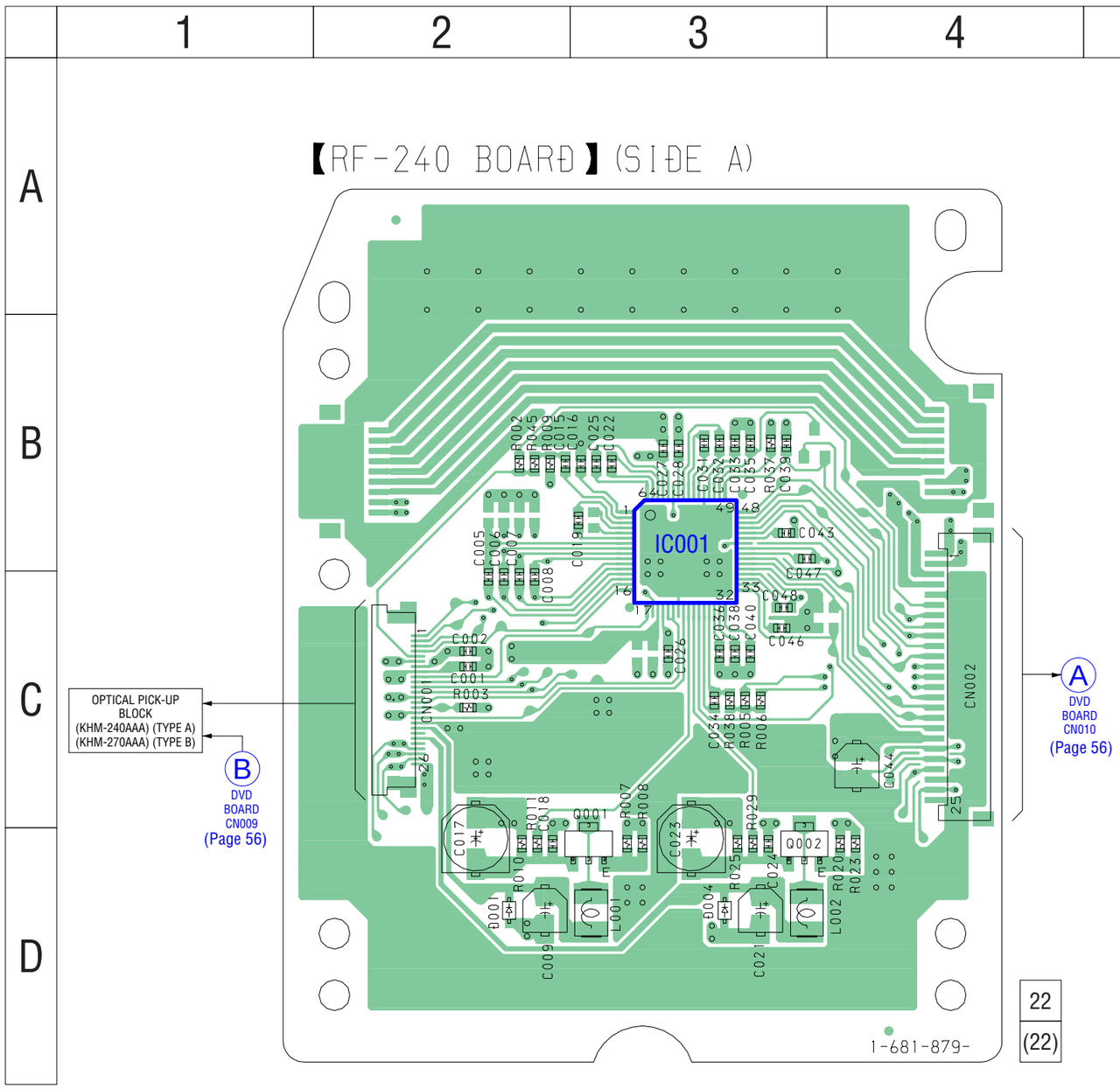


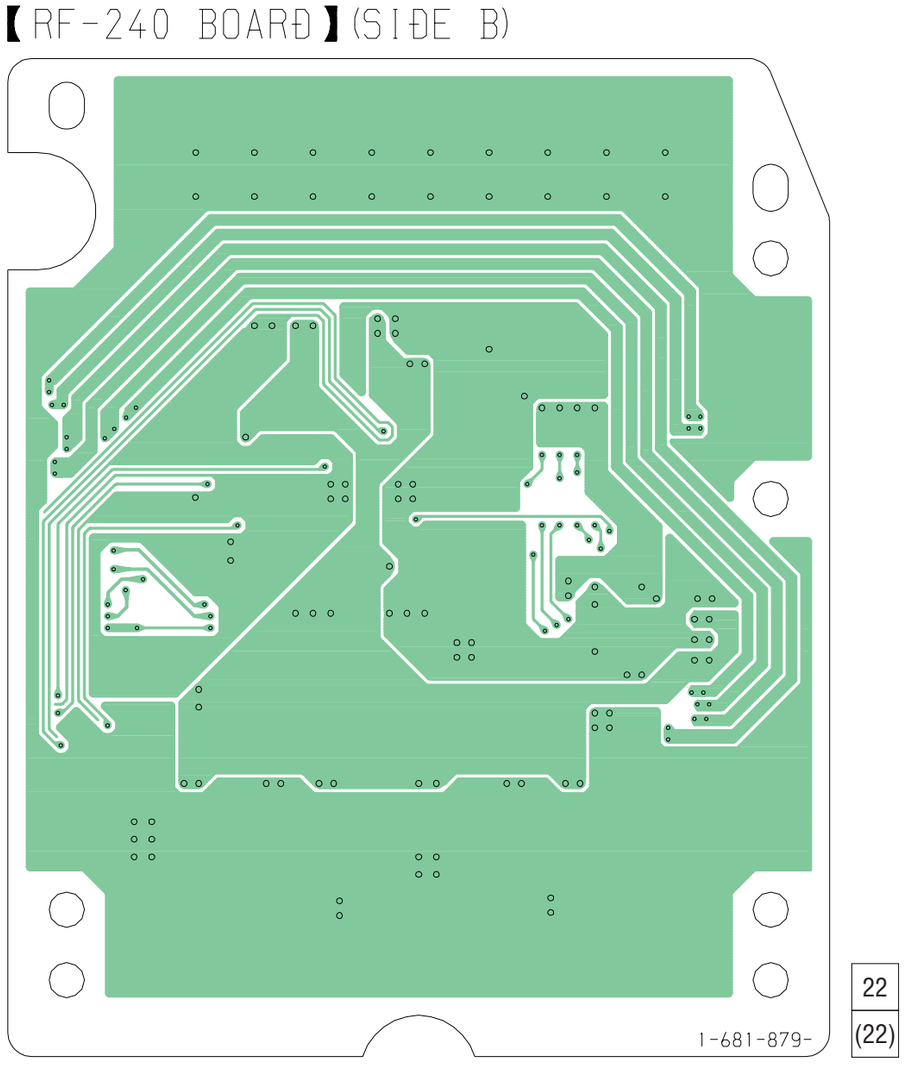
• Voltages and waveforms are dc with respect to ground under no-signal conditions.
no mark : DVD PLAY
( ) : CD PLAY

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.	以阴影和⚠标志来识别的零部件在安全方面具有关键性。因此只能以规定号码的零部件来更换。

6-10. PRINTED WIRING BOARD – RF-240 Board (Suffix-22) –

• See page 35 for Circuit Boards Location. • Refer to servicing notes (page 8) for discrimination of TYPE A/B.



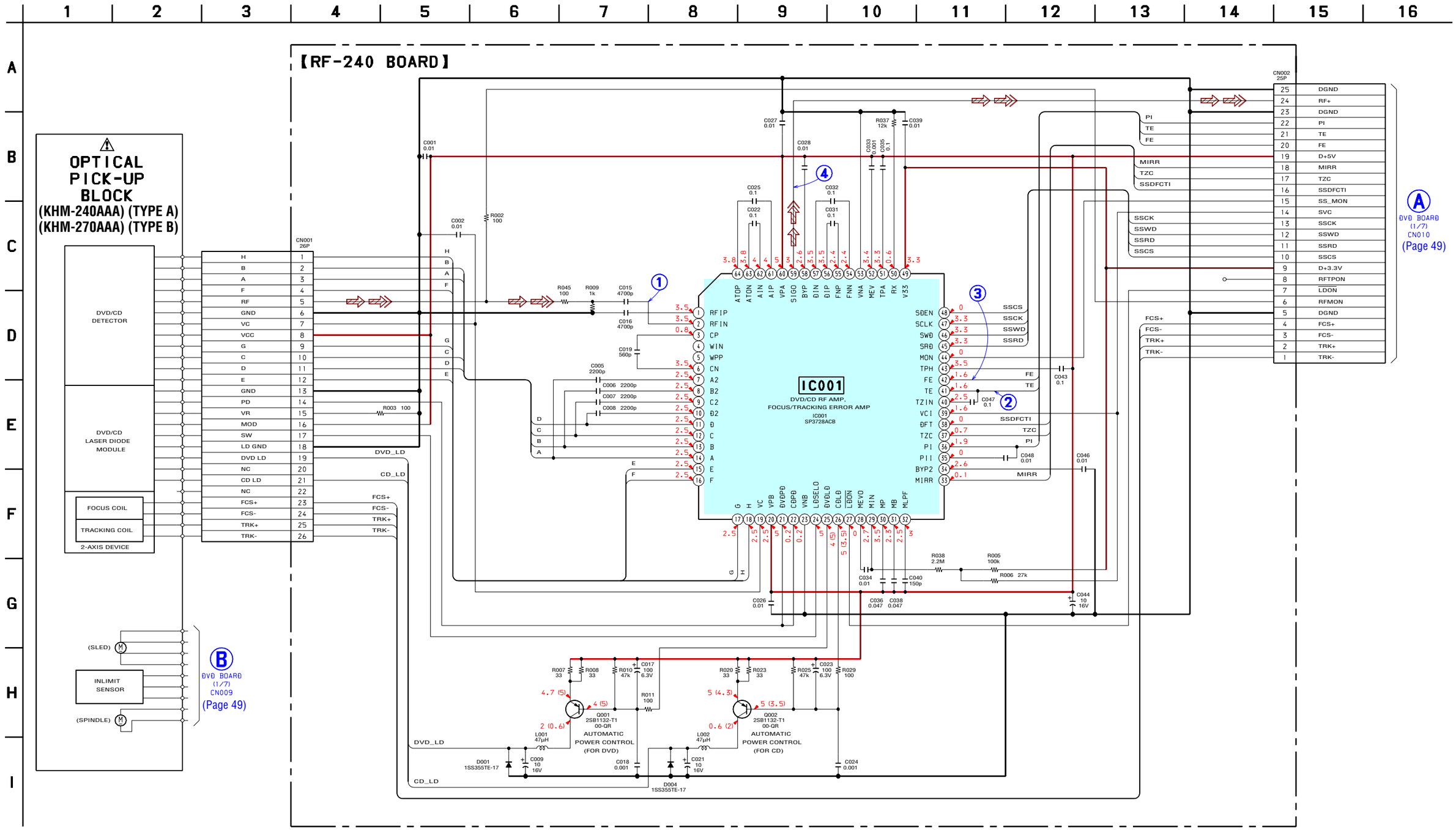


- **Semiconductor Location**

Ref. No.	Location
D001	D-2
D004	D-3
IC001	B-3
Q001	D-3
Q002	D-3

6-11. SCHEMATIC DIAGRAM – RF-240 Board (Suffix-22) –

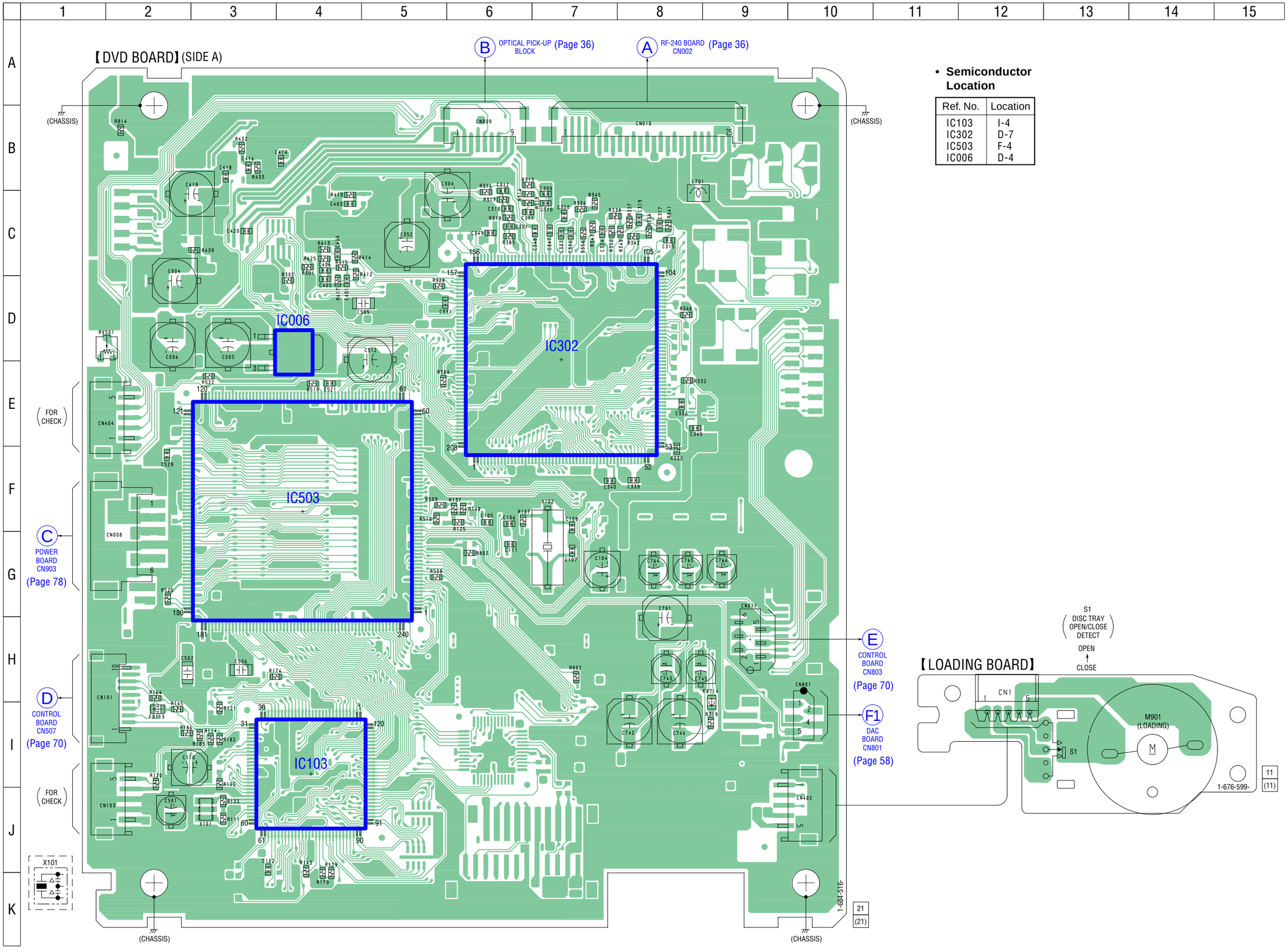
• See page 82 for Waveforms. • Refer to servicing notes (page 8) for discrimination of TYPE A/B.



• Voltages and waveforms are dc with respect to ground under no-signal conditions.
no mark : DVD PLAY
( ) : CD PLAY

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.	以阴影和⚠标志来识别的零部件在安全方面具有关键性。因此只能以规定号码的零部件来更换。

6-12. PRINTED WIRING BOARDS – DVD (Side A) (Suffix-21)/LOADING Boards – • See page 35 for Circuit Boards Location.

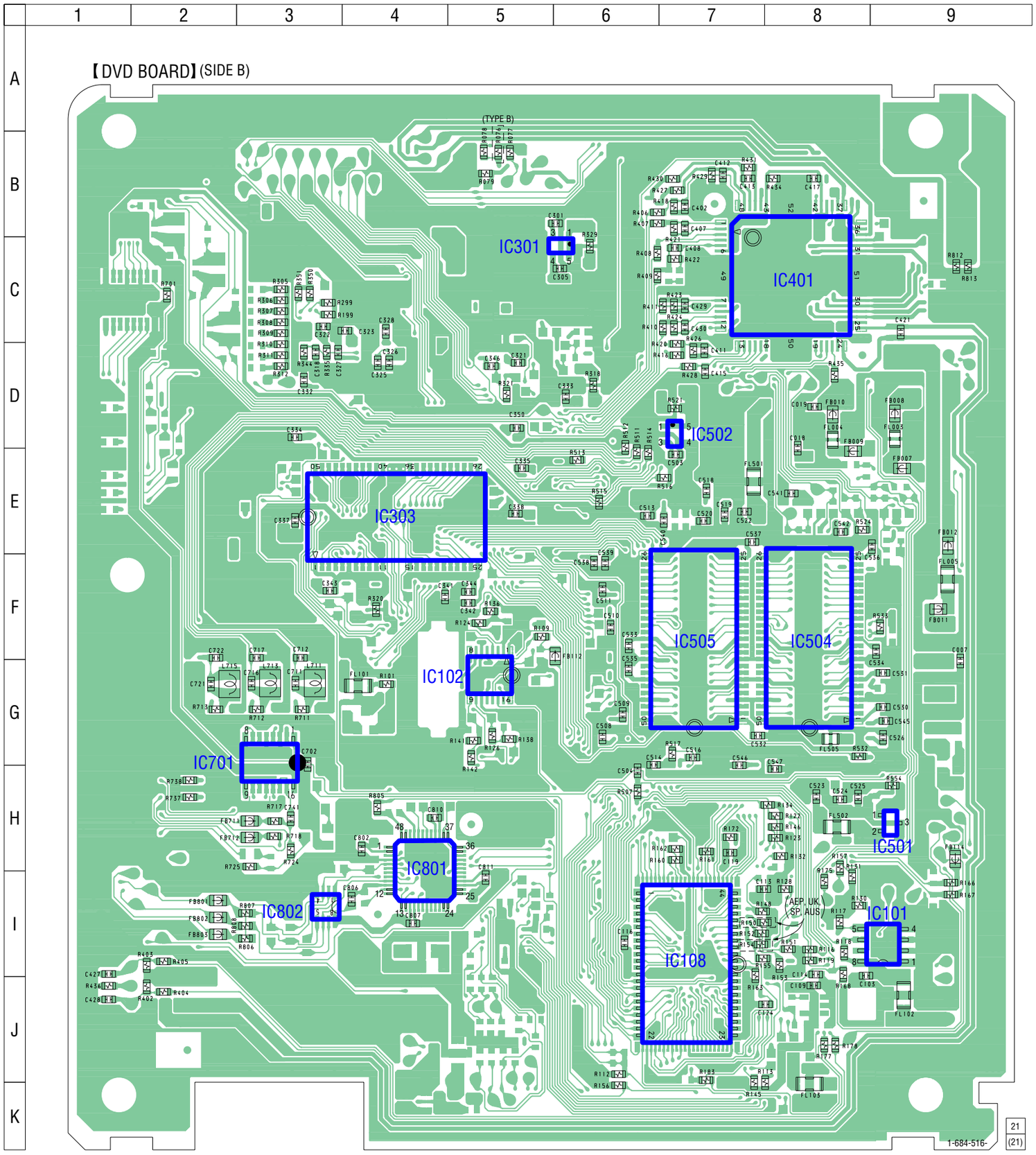


- **Semiconductor Location**

Ref. No.	Location
IC103	I-4
IC302	D-7
IC503	F-4
IC006	D-4

6-13. PRINTED WIRING BOARD – DVD Board (Side B) (Suffix-21) –

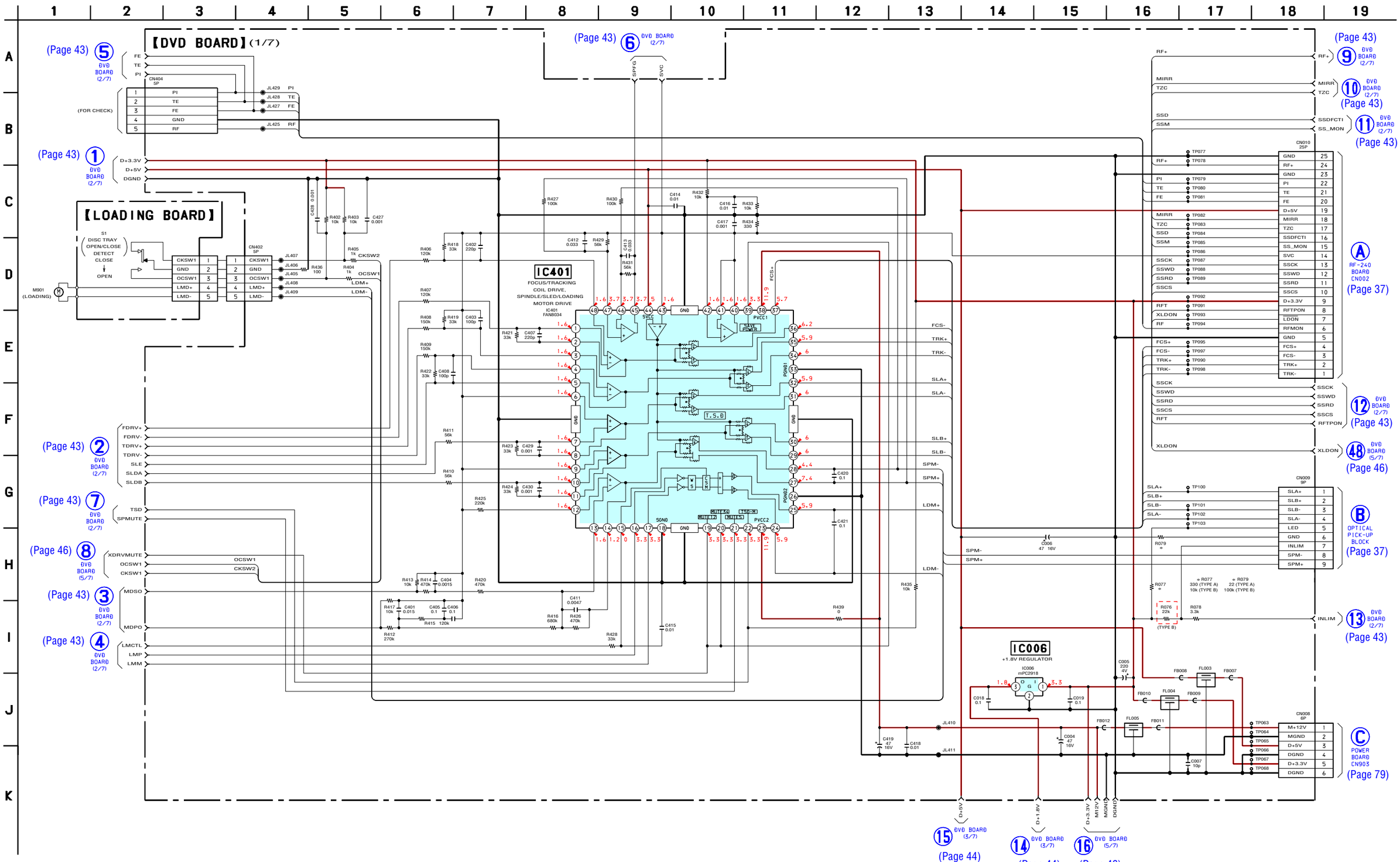
• See page 35 for Circuit Boards Location. • Refer to servicing notes (page 8) for discrimination of TYPE A/B.



- **Semiconductor Location**

Ref. No.	Location
IC101	I-9
IC102	G-5
IC108	I-7
IC301	C-6
IC303	E-4
IC401	C-8
IC501	H-9
IC502	D-7
IC504	F-8
IC505	F-7
IC701	G-3
IC801	H-4
IC802	I-3

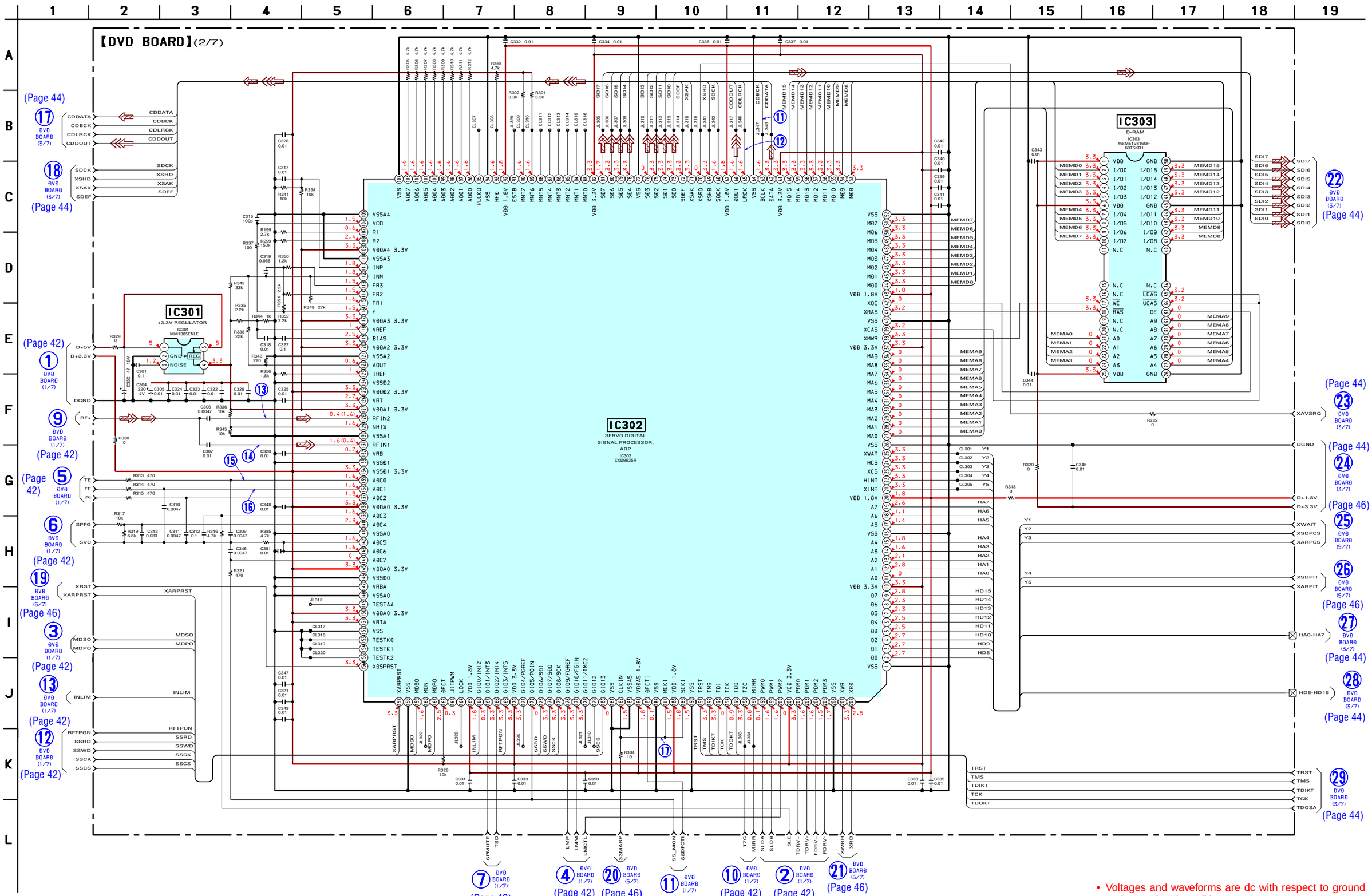
6-14. SCHEMATIC DIAGRAM – DVD (1/7) (Suffix-21)/LOADING Boards – • Refer to servicing notes (page 8) for discrimination of TYPE A/B.



• Voltages and waveforms are dc with respect to ground under no-signal conditions.
no mark : DVD PLAY

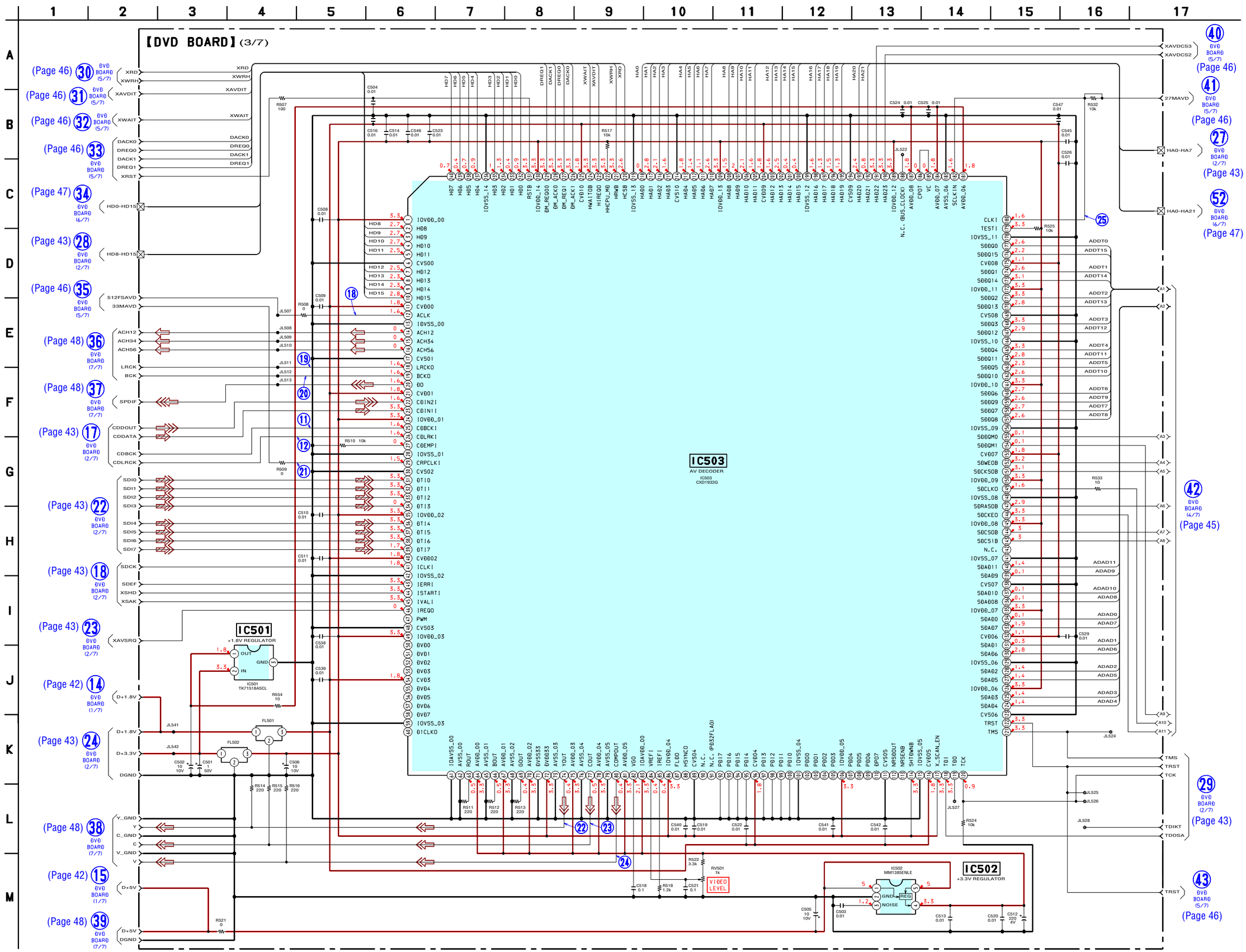
6-15. SCHEMATIC DIAGRAM – DVD Board (2/7) (Suffix-21) –

• See page 82 for Waveforms.



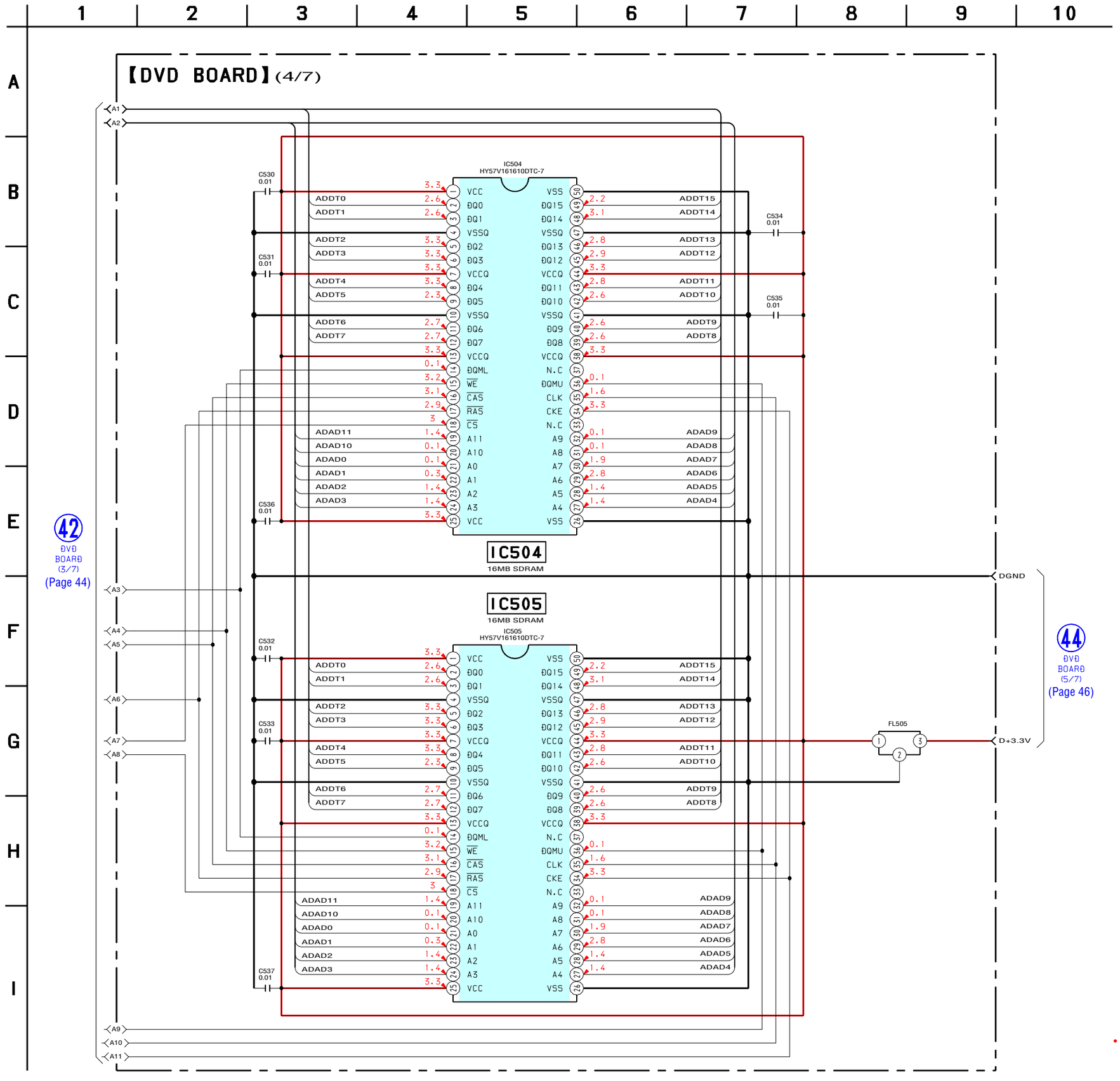
- Voltages and waveforms are dc with respect to ground under no-signal conditions.
  no mark : DVD PLAY
  ( ) : CD PLAY

6-16. SCHEMATIC DIAGRAM – DVD Board (3/7) (Suffix-21) – • See page 82 for Waveforms.


【DVD BOARD】(3/7)
IC503
AV DECODER
IC503
CXD1933Q
IC501
+1.8V REGULATOR
IC501
TK71518ASCL
IC502
+3.3V REGULATOR
IC502
MM1385ENLE
VIDEO LEVEL
REG
NOISE
(Page 46) 30 DVD BOARD (5/7) XRD XWRH
(Page 46) 31 DVD BOARD (5/7) XAVDIT
(Page 46) 32 DVD BOARD (5/7) XWAIT
(Page 46) 33 DVD BOARD (5/7) DACK0 DREQ0 DACK1 DREQ1 XRST
(Page 47) 34 DVD BOARD (6/7) HD0-HD15
(Page 43) 28 DVD BOARD (2/7) HD8-HD15
(Page 46) 35 DVD BOARD (5/7) 512FSAVD 33MAVD
(Page 48) 36 DVD BOARD (7/7) ACH12 ACH34 ACH56 LRCK BCK
(Page 48) 37 DVD BOARD (7/7) SPDIF
(Page 43) 17 DVD BOARD (2/7) CDDOUT CDDATA CDBCK CDLRCK
(Page 43) 22 DVD BOARD (2/7) SDI0 SDI1 SDI2 SDI3 SDI4 SDI5 SDI6 SDI7
(Page 43) 18 DVD BOARD (2/7) SDCK SDEF XSHD XSAK
(Page 43) 23 DVD BOARD (2/7) XAVSRQ
(Page 42) 14 DVD BOARD (1/7) D+1.8V
(Page 43) 24 DVD BOARD (2/7) D+1.8V D+3.3V DGND
(Page 48) 38 DVD BOARD (7/7) Y_GND Y C_GND C V_GND V
(Page 42) 15 DVD BOARD (1/7) D+5V
(Page 48) 39 DVD BOARD (7/7) D+5V DGND
40 DVD BOARD (5/7) XAVDCS3 XAVDCS2 (Page 46)
41 DVD BOARD (5/7) 27MAVD (Page 46)
27 DVD BOARD (2/7) HA0-HA7 (Page 43)
52 DVD BOARD (6/7) HA0-HA21 (Page 47)
42 DVD BOARD (4/7) (Page 45)
29 DVD BOARD (2/7) TMS TRST TCK TDIKT TDOSA (Page 43)
43 DVD BOARD (5/7) TRST (Page 46)

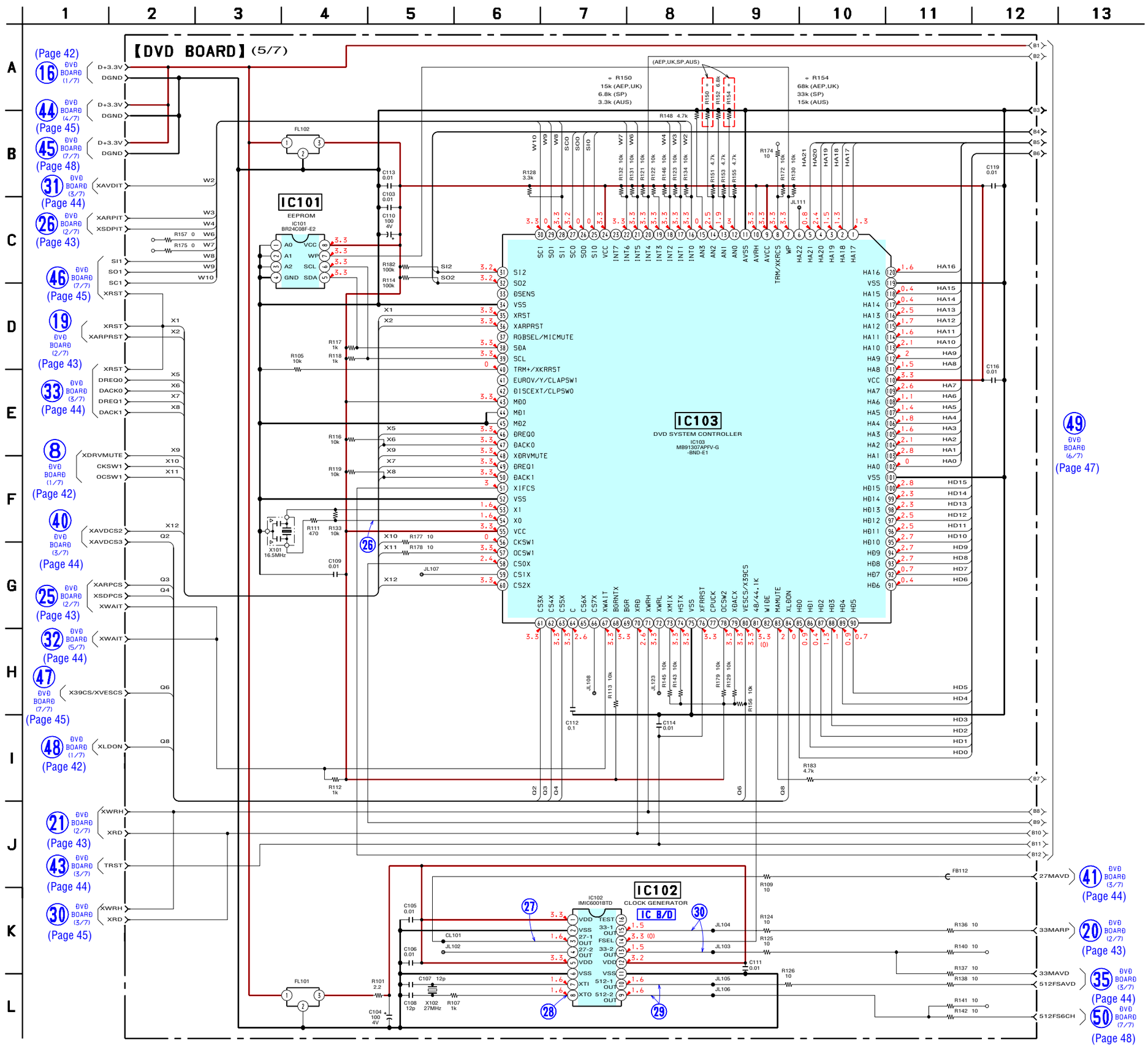
• Voltages and waveforms are dc with respect to ground under no-signal conditions.
no mark : DVD PLAY

6-17. SCHEMATIC DIAGRAM – DVD Board (4/7) (Suffix-21) –



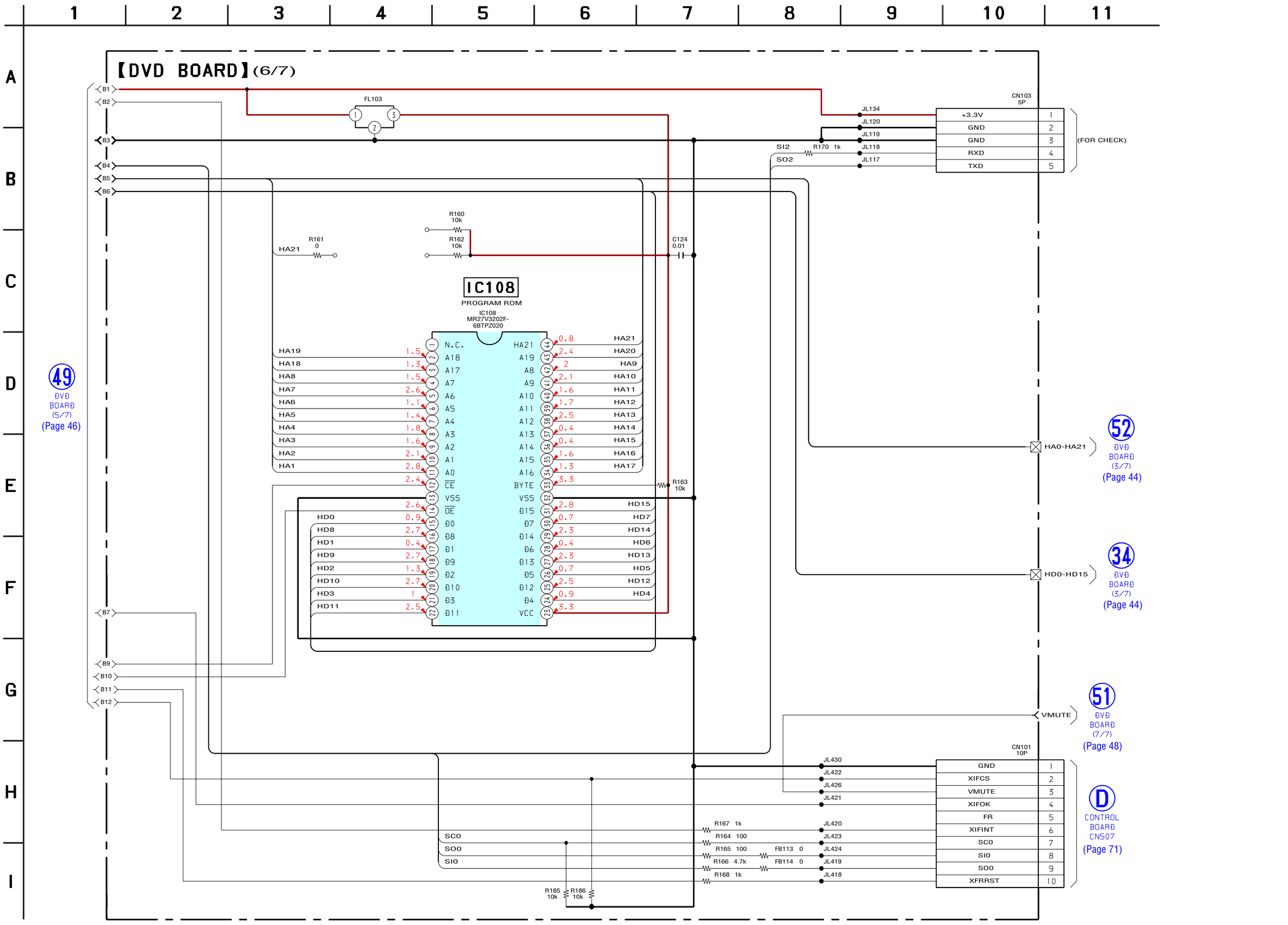
- Voltages and waveforms are dc with respect to ground under no-signal conditions.
  no mark : DVD PLAY

6-18. SCHEMATIC DIAGRAM – DVD Board (5/7) (Suffix-21) – • See page 82 for Waveforms. • See page 85 for IC Block Diagram.


【DVD BOARD】(5/7)
IC101
EEPROM
IC101
BR24C08F-E2
IC103
DVD SYSTEM CONTROLLER
IC103
MB91307APFV-G
-BND-E1
IC102
CLOCK GENERATOR
IC102
IMIC6001BTD
IC B/D
FL102
FL101
X101
16.5MHz
X102
27MHz
JL111
JL107
JL108
JL123
JL104
JL103
JL105
JL106
(AEP,UK,SP,AUS)
R150 * 15k (AEP,UK) 6.8k (SP) 3.3k (AUS)
R154 * 68k (AEP,UK) 33k (SP) 15k (AUS)
R152 6.8k
R148 4.7k
(Page 42) 16 DVD BOARD (1/7) D+3.3V DGND
44 DVD BOARD (4/7) (Page 45) D+3.3V DGND
45 DVD BOARD (7/7) (Page 48) D+3.3V DGND
31 DVD BOARD (3/7) (Page 44) XAVDIT
26 DVD BOARD (2/7) (Page 43) XARPIT XSDPIT
46 DVD BOARD (7/7) (Page 45) SI1 SO1 SC1 XRST
19 DVD BOARD (2/7) (Page 43) XRST XARPRST
33 DVD BOARD (3/7) (Page 44) XRST DREQ0 DACK0 DREQ1 DACK1
8 DVD BOARD (1/7) (Page 42) XDRVMUTE CKSW1 OCSW1
40 DVD BOARD (3/7) (Page 44) XAVDCS2 XAVDCS3
25 DVD BOARD (2/7) (Page 43) XARPCS XSDPCS XWAIT
32 DVD BOARD (5/7) (Page 44) XWAIT
47 DVD BOARD (7/7) (Page 45) X39CS/XVESCS
48 DVD BOARD (1/7) (Page 42) XLDON
21 DVD BOARD (2/7) (Page 43) XWRH XRD
43 DVD BOARD (3/7) (Page 44) TRST
30 DVD BOARD (3/7) (Page 45) XWRH XRD
49 DVD BOARD (6/7) (Page 47)
41 DVD BOARD (3/7) (Page 44) 27MAVD
20 DVD BOARD (2/7) (Page 43) 33MARP
35 DVD BOARD (3/7) (Page 44) 33MAVD 512FSAVD
50 DVD BOARD (7/7) (Page 48) 512FS6CH
SI2 SO2 ØSENS VSS XRST XARPRST RGBSEL/MICMUTE SDA SCL TRM+/XKRRST EUROV/Y/CLAPSW1 ØISCEXT/CLPSW0 MØ0 MØ1 MØ2 ØREQ0 ØACK0 XØRVMUTE ØREQ1 ØACK1 XIFCS VSS XI XO VCC CKSW1 OCSW1 CS0X CS1X CS2X
HA16 VSS HA15 HA14 HA13 HA12 HA11 HA10 HA9 HA8 VCC HA7 HA6 HA5 HA4 HA3 HA2 HA1 HA0 VSS HD15 HD14 HD13 HD12 HD11 HD10 HD9 HD8 HD7 HD6
HD5 HD4 HD3 HD2 HD1 HD0
B1 B2 B3 B4 B5 B6 B7 B8 B9 B10 B11 B12
Q2 Q3 Q4 Q6 Q8

- Voltages and waveforms are dc with respect to ground under no-signal conditions.
  no mark : DVD PLAY
  ( ) : CD PLAY

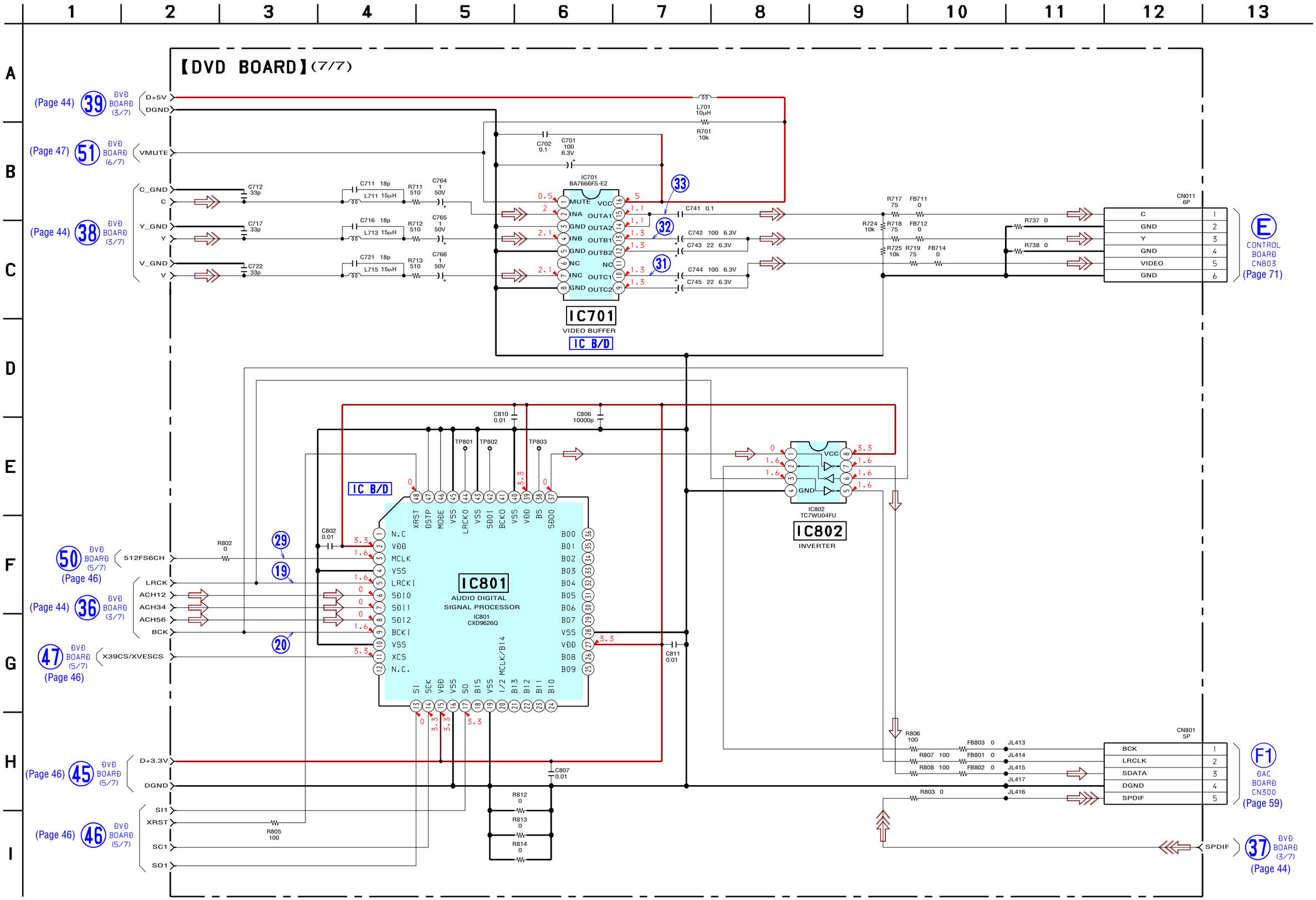
6-19. SCHEMATIC DIAGRAM – DVD Board (6/7) (Suffix-21) –



- Voltages and waveforms are dc with respect to ground under no-signal conditions.
  no mark : DVD PLAY

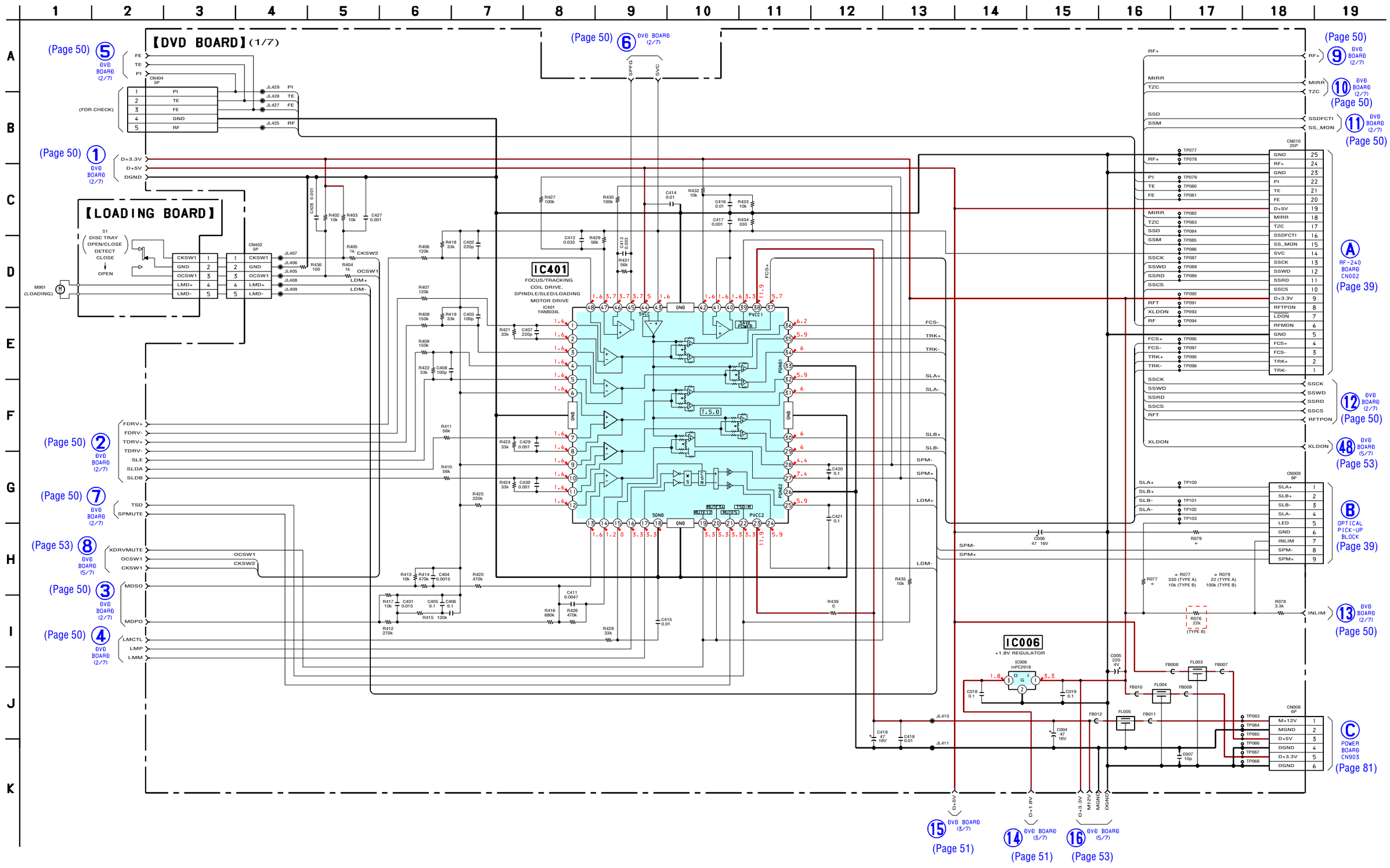
6-20. SCHEMATIC DIAGRAM – DVD Board (7/7) (Suffix-21) –

• See page 82 for Waveforms. • See page 85 for IC Block Diagrams.



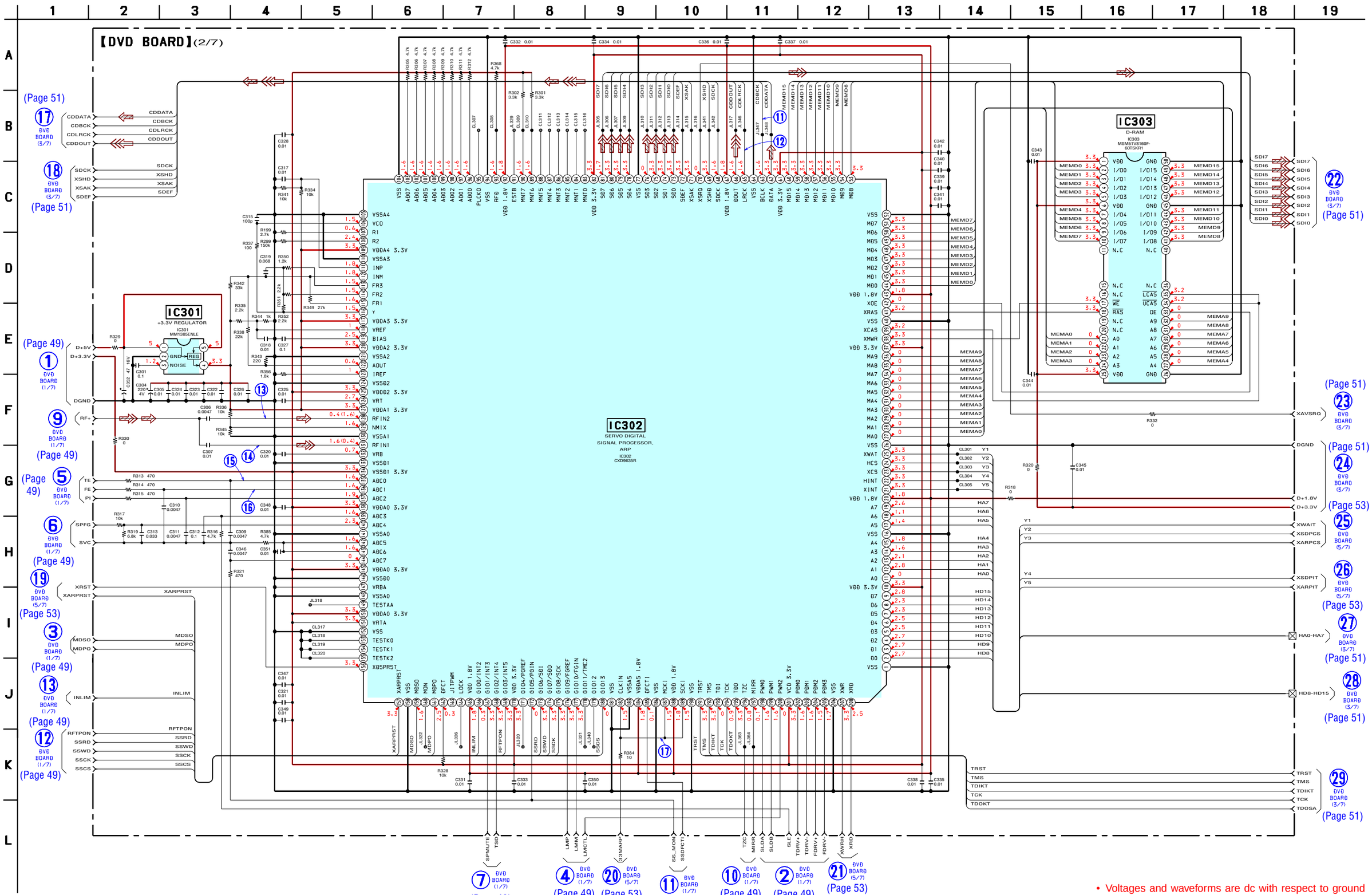
• Voltages and waveforms are dc with respect to ground under no-signal conditions.
no mark : DVD PLAY

6-21. SCHEMATIC DIAGRAM – DVD (1/7) (Suffix-22)/LOADING Boards – • Refer to servicing notes (page 8) for discrimination of TYPE A/B.

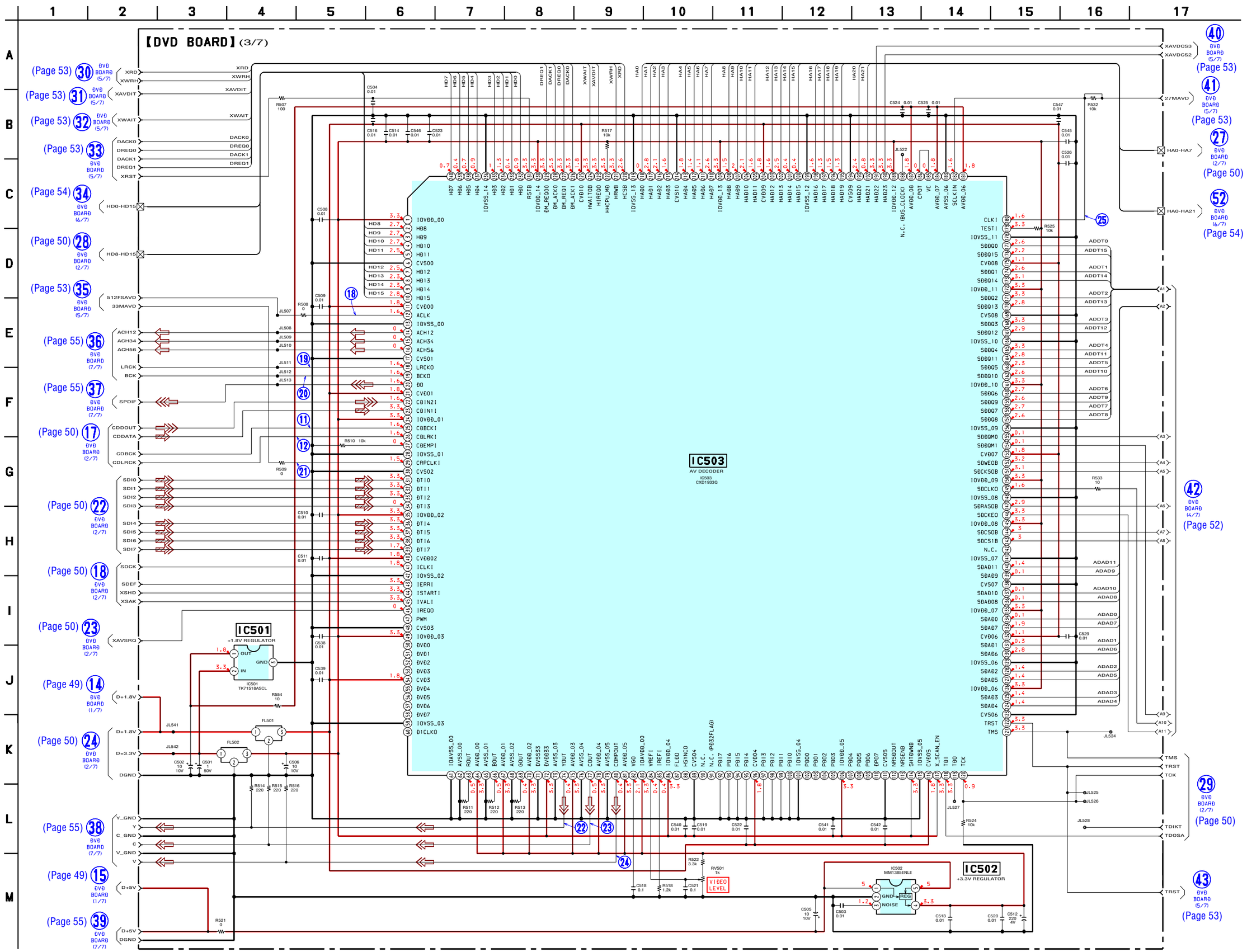


• Voltages and waveforms are dc with respect to ground under no-signal conditions.
no mark : DVD PLAY

6-22. SCHEMATIC DIAGRAM – DVD Board (2/7) (Suffix-22) – • See page 82 for Waveforms.

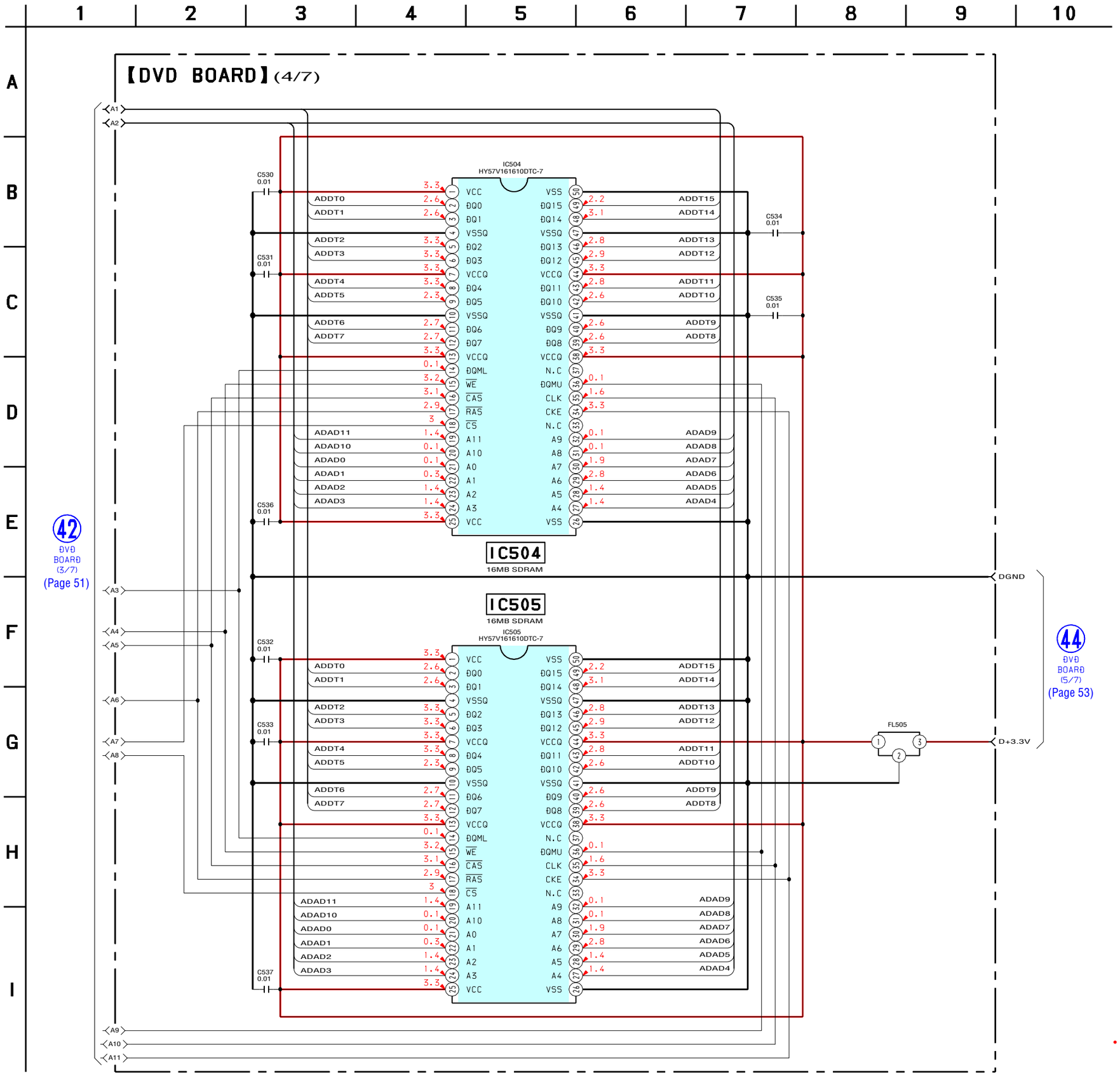


6-23. SCHEMATIC DIAGRAM – DVD Board (3/7) (Suffix-22) – • See page 82 for Waveforms.


【DVD BOARD】(3/7)
IC503
AV DECODER
IC503
CXD1933Q
IC501
+1.8V REGULATOR
IC501
TK71518ASCL
IC502
+3.3V REGULATOR
IC502
MM1385ENLE
VIDEO LEVEL
(Page 53) 30 DVD BOARD (5/7) XRD XWRH
(Page 53) 31 DVD BOARD (5/7) XAVDIT
(Page 53) 32 DVD BOARD (5/7) XWAIT
(Page 53) 33 DVD BOARD (5/7) DACK0 DREQ0 DACK1 DREQ1 XRST
(Page 54) 34 DVD BOARD (6/7) HD0-HD15
(Page 50) 28 DVD BOARD (2/7) HD8-HD15
(Page 53) 35 DVD BOARD (5/7) 512FSAVD 33MAVD
(Page 55) 36 DVD BOARD (7/7) ACH12 ACH34 ACH56 LRCK BCK
(Page 55) 37 DVD BOARD (7/7) SPDIF
(Page 50) 17 DVD BOARD (2/7) CDDOUT CDDATA CDBCK CDLRCK
(Page 50) 22 DVD BOARD (2/7) SDI0 SDI1 SDI2 SDI3 SDI4 SDI5 SDI6 SDI7
(Page 50) 18 DVD BOARD (2/7) SDCK SDEF XSHD XSAK
(Page 50) 23 DVD BOARD (2/7) XAVSRQ
(Page 49) 14 DVD BOARD (1/7) D+1.8V
(Page 50) 24 DVD BOARD (2/7) D+1.8V D+3.3V DGND
(Page 55) 38 DVD BOARD (7/7) Y_GND Y C_GND C V_GND V
(Page 49) 15 DVD BOARD (1/7) D+5V
(Page 55) 39 DVD BOARD (7/7) D+5V DGND
40 DVD BOARD (5/7) (Page 53) XAVDCS3 XAVDCS2
41 DVD BOARD (5/7) (Page 53) 27MAVD
27 DVD BOARD (2/7) (Page 50) HA0-HA7
52 DVD BOARD (6/7) (Page 54) HA0-HA21
42 DVD BOARD (4/7) (Page 52)
29 DVD BOARD (2/7) (Page 50) TMS TRST TCK TDIKT TDOSA
43 DVD BOARD (5/7) (Page 53) TRST
HD0 HD1 HD2 HD3 HD4 HD5 HD6 HD7 HD8 HD9 HD10 HD11 HD12 HD13 HD14 HD15
HA0 HA1 HA2 HA3 HA4 HA5 HA6 HA7 HA8 HA9 HA10 HA11 HA12 HA13 HA14 HA15 HA16 HA17 HA18 HA19 HA20 HA21
ADDT0 ADDT15 ADDT1 ADDT14 ADDT2 ADDT13 ADDT3 ADDT12 ADDT4 ADDT11 ADDT5 ADDT10 ADDT6 ADDT9 ADDT7 ADDT8
ADAD11 ADAD9 ADAD10 ADAD8 ADAD0 ADAD7 ADAD1 ADAD6 ADAD2 ADAD5 ADAD3 ADAD4

• Voltages and waveforms are dc with respect to ground under no-signal conditions.
no mark : DVD PLAY

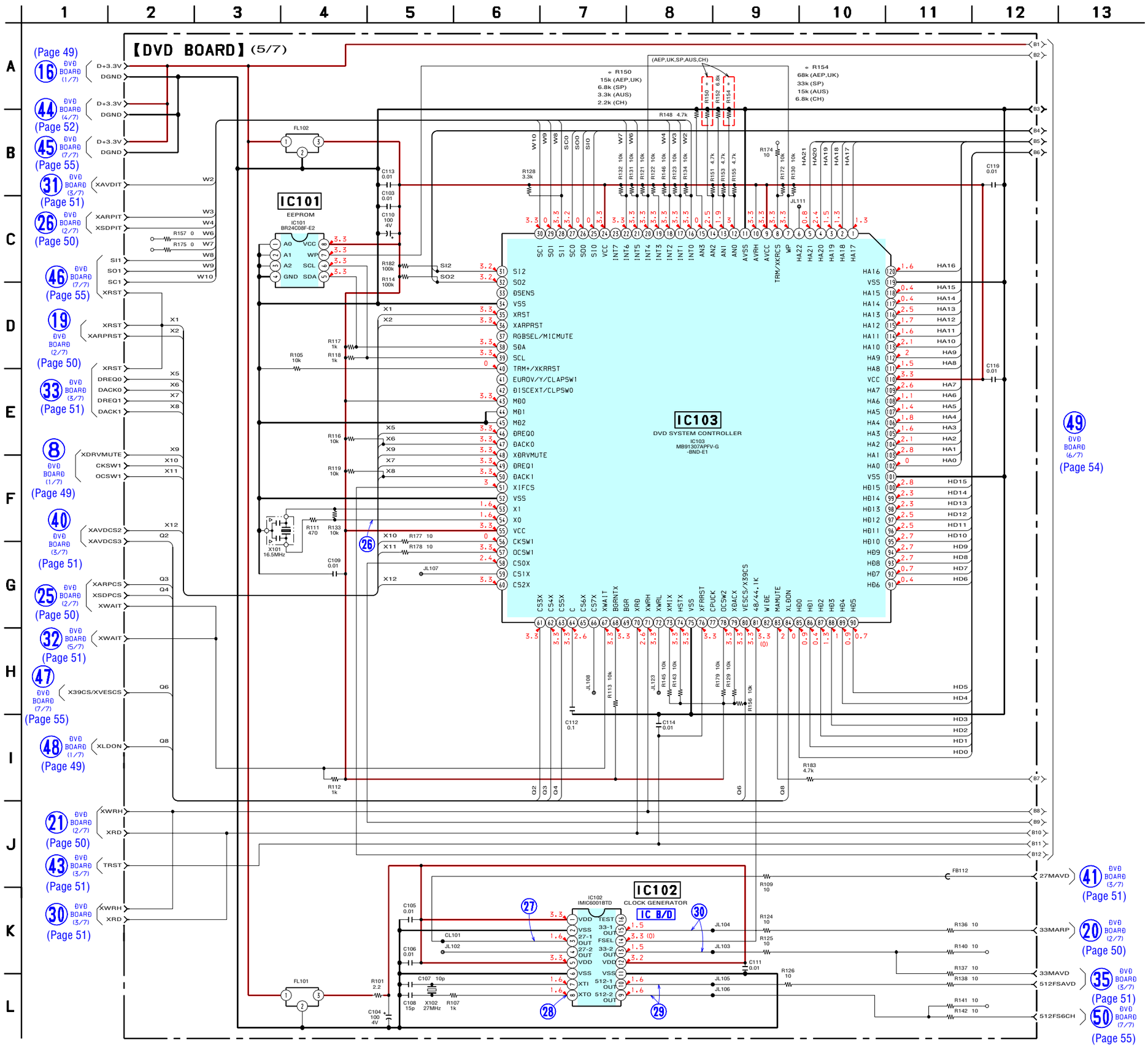
6-24. SCHEMATIC DIAGRAM – DVD Board (4/7) (Suffix-22) –



- Voltages and waveforms are dc with respect to ground under no-signal conditions.
  no mark : DVD PLAY

6-25. SCHEMATIC DIAGRAM – DVD Board (5/7) (Suffix-22) –

• See page 82 for Waveforms. • See page 85 for IC Block Diagram.



- Voltages and waveforms are dc with respect to ground under no-signal conditions.
  no mark : DVD PLAY
  ( ) : CD PLAY

6-26. SCHEMATIC DIAGRAM – DVD Board (6/7) (Suffix-22) –

【DVD BOARD】(6/7)

B1 B2 B3 B4 B5 B6 B7 B9 B10 B11 B12

FL103

JL134 JL120 JL119 JL118 JL117

CN103 5P
+3.3V 1
GND 2
GND 3
RXD 4
TXD 5
(FOR CHECK)

SI2 R170 1k SO2

R160 10k
R161 0 HA21
R162 10k
C124 0.01

IC108
PROGRAM ROM
IC108
MR27V3202F-
8UTPZ020

HA19	1.5	1	N.C.	HA21	44	0.8	HA21
HA18	1.3	2	A18	A19	43	2.4	HA20
HA8	1.5	3	A17	A8	42	2	HA9
HA7	2.6	4	A7	A9	41	2.1	HA10
HA6	1.1	5	A6	A10	40	1.6	HA11
HA5	1.4	6	A5	A11	39	1.7	HA12
HA4	1.8	7	A4	A12	38	2.5	HA13
HA3	1.6	8	A3	A13	37	0.4	HA14
HA2	2.1	9	A2	A14	36	0.4	HA15
HA1	2.8	10	A1	A15	35	1.6	HA16
	2.4	11	A0	A16	34	1.3	HA17
		12	CE	BYTE	33	3.3	
		13	VSS	VSS	32		
	2.6	14	OE	Ð15	31	2.8	HD15
HD0	0.9	15	Ð0	Ð7	30	0.7	HD7
HD8	2.7	16	Ð8	Ð14	29	2.3	HD14
HD1	0.4	17	Ð1	Ð6	28	0.4	HD6
HD9	2.7	18	Ð9	Ð13	27	2.3	HD13
HD2	1.3	19	Ð2	Ð5	26	0.7	HD5
HD10	2.7	20	Ð10	Ð12	25	2.5	HD12
HD3	1	21	Ð3	Ð4	24	0.9	HD4
HD11	2.5	22	Ð11	VCC	23	3.3	

R163 10k

SC0 SO0 SI0

R167 1k
R164 100
R165 100 FB113 0
R166 4.7k FB114 0
R168 1k

JL420 JL423 JL424 JL419 JL418

R185 10k R186 10k

JL430 JL422 JL426 JL421

CN101 10P
GND 1
XIFCS 2
VMUTE 3
XIFOK 4
FR 5
XIFINT 6
SC0 7
SI0 8
SO0 9
XFRRST 10

HA0-HA21

HD0-HD15

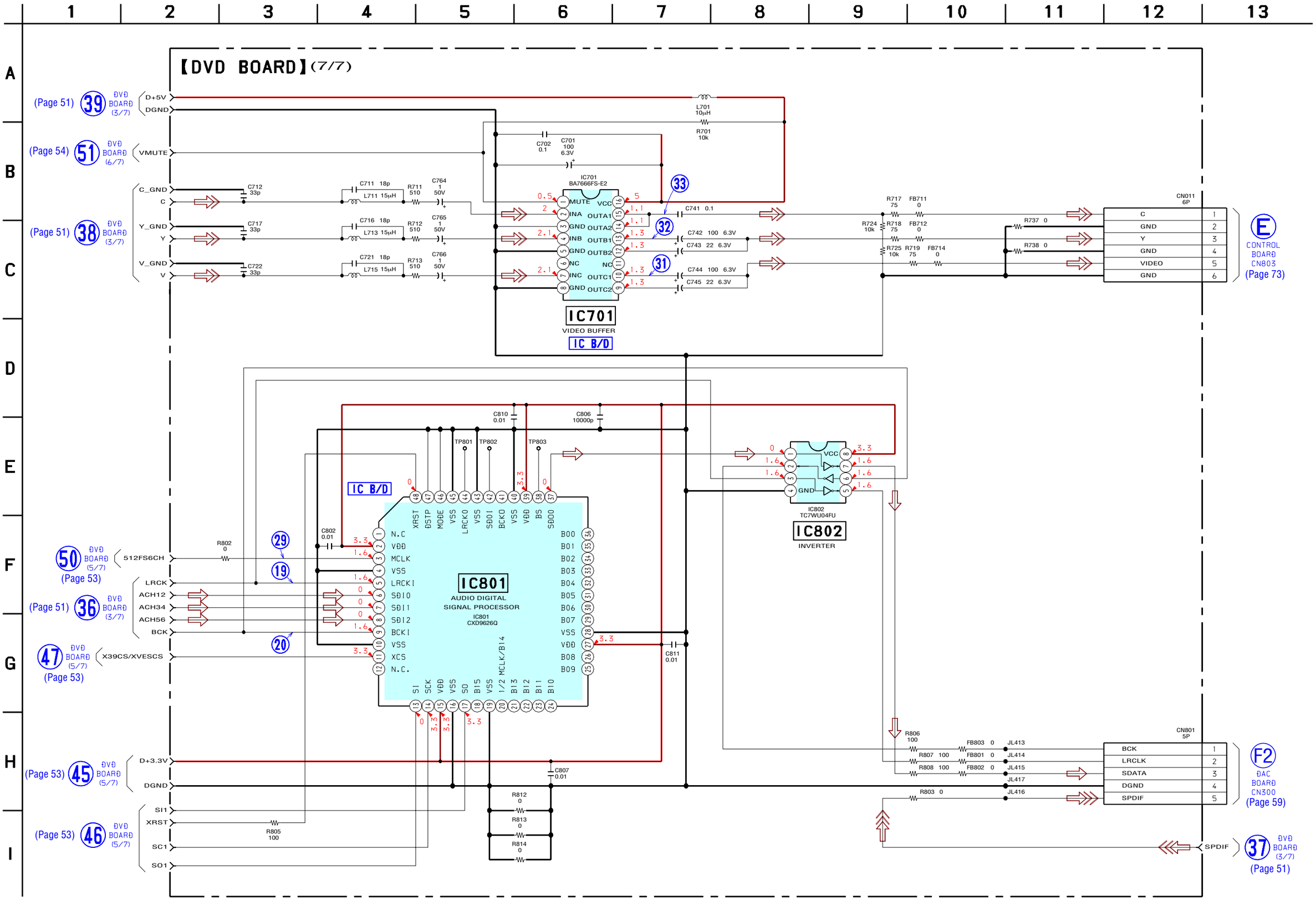
VMUTE

49 ÐVÐ BOARÐ (5/7) (Page 53)
52 ÐVÐ BOARÐ (3/7) (Page 51)
34 ÐVÐ BOARÐ (3/7) (Page 51)
51 ÐVÐ BOARÐ (7/7) (Page 55)
D CONTROL BOARÐ CN507 (Page 73)

• Voltages and waveforms are dc with respect to ground under no-signal conditions.
no mark : DVD PLAY

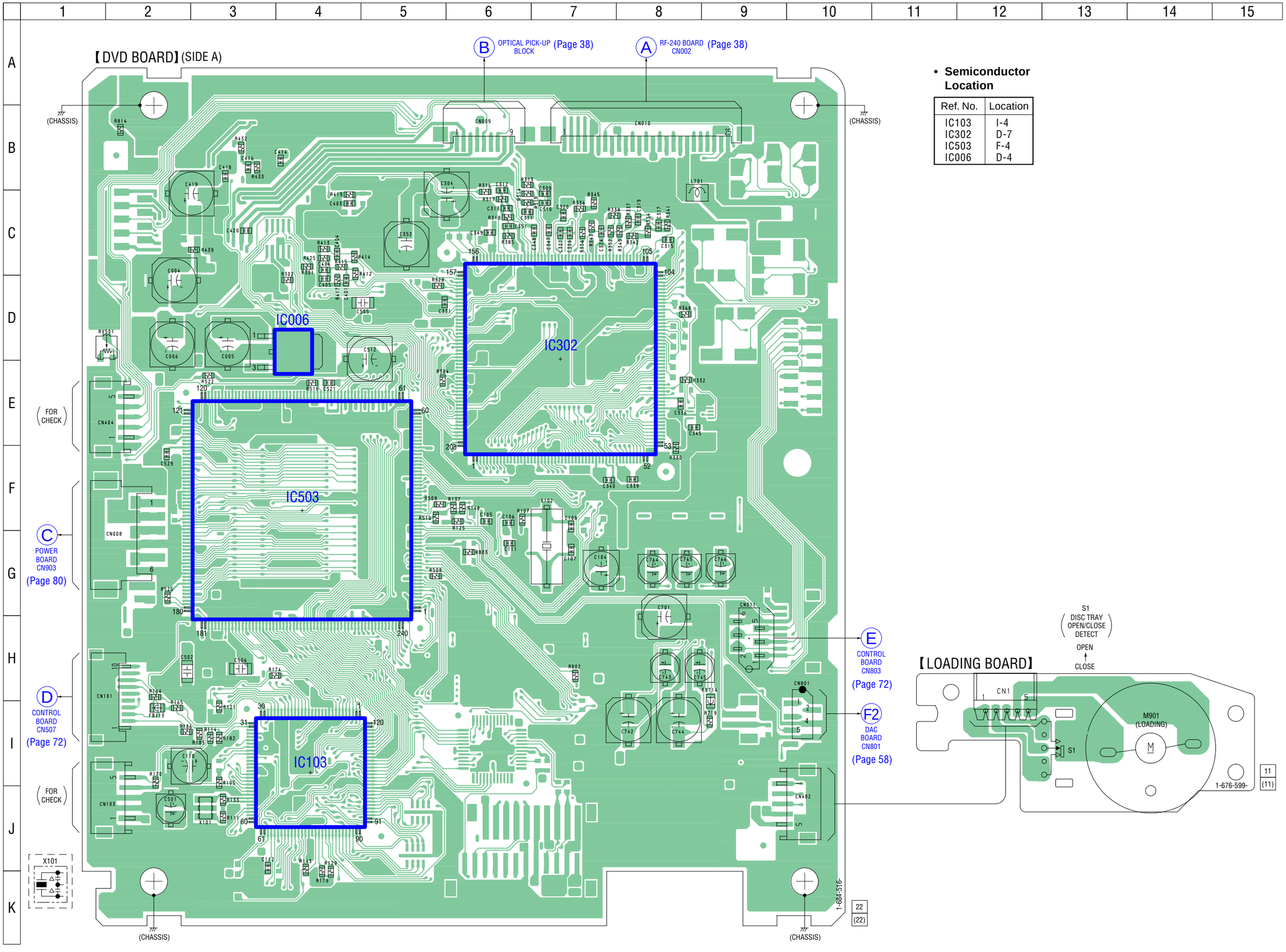
6-27. SCHEMATIC DIAGRAM – DVD Board (7/7) (Suffix-22) –

• See page 82 for Waveforms. • See page 85 for IC Block Diagrams.


【DVD BOARD】(7/7)
(Page 51) 39 DVD BOARD (3/7) D+5V
DGND
(Page 54) 51 DVD BOARD (6/7) VMUTE
(Page 51) 38 DVD BOARD (3/7) C_GND C Y_GND Y V_GND V
(Page 51) 36 DVD BOARD (3/7) LRCK ACH12 ACH34 ACH56 BCK
(Page 53) 50 DVD BOARD (5/7) 512FS6CH
(Page 53) 47 DVD BOARD (5/7) X39CS/XVESCS
(Page 53) 45 DVD BOARD (5/7) D+3.3V DGND
(Page 53) 46 DVD BOARD (5/7) SI1 XRST SC1 SO1
IC701 BA7666FS-E2
MUTE VCC INA OUTA1 GND OUTA2 INB OUTB1 GND OUTB2 NC NC INC OUTC1 GND OUTC2
IC701 VIDEO BUFFER IC B/D
IC801 AUDIO DIGITAL SIGNAL PROCESSOR IC801 CXD9626Q
N.C VDD MCLK VSS LRCKI SDI0 SDI1 SDI2 BCKI VSS XCS N.C.
XRST BSTP MODE VSS LRCKO VSS SDOI BCKO VSS VDD BS SDOO
B00 B01 B02 B03 B04 B05 B06 B07 VSS VDD B08 B09
SI SCK VDD VSS SO B15 VSS 1/2 MCLK/B14 B13 B12 B11 B10
IC802 TC7WU04FU
IC802 INVERTER
VCC GND
CN011 6P C GND Y GND VIDEO GND
(E) CONTROL BOARD CN803 (Page 73)
CN801 5P BCK LRCLK SDATA DGND SPDIF
(F2) DAC BOARD CN300 (Page 59)
SPDIF (37) DVD BOARD (3/7) (Page 51)
L701 10µH
R701 10k
C702 0.1
C701 100 6.3V
C712 33p
C717 33p
C722 33p
C711 18p L711 15µH R711 510
C716 18p L713 15µH R712 510
C721 18p L715 15µH R713 510
C764 1 50V
C765 1 50V
C766 1 50V
C741 0.1
C742 100 6.3V
C743 22 6.3V
C744 100 6.3V
C745 22 6.3V
R717 75 FB711 0
R718 75 FB712 0
R719 75 FB714 0
R724 10k
R725 10k
R737 0
R738 0
C810 0.01
C806 10000p
TP801 TP802 TP803
C802 0.01
R802 0
R805 100
C811 0.01
C807 0.01
R812 0
R813 0
R814 0
R806 100
R807 100
R808 100
R803 0
FB803 0 JL413
FB801 0 JL414
FB802 0 JL415
JL417
JL416

• Voltages and waveforms are dc with respect to ground under no-signal conditions.
no mark : DVD PLAY

6-28. PRINTED WIRING BOARDS – DVD (Side A) (Suffix-22)/LOADING Boards – • See page 35 for Circuit Boards Location.

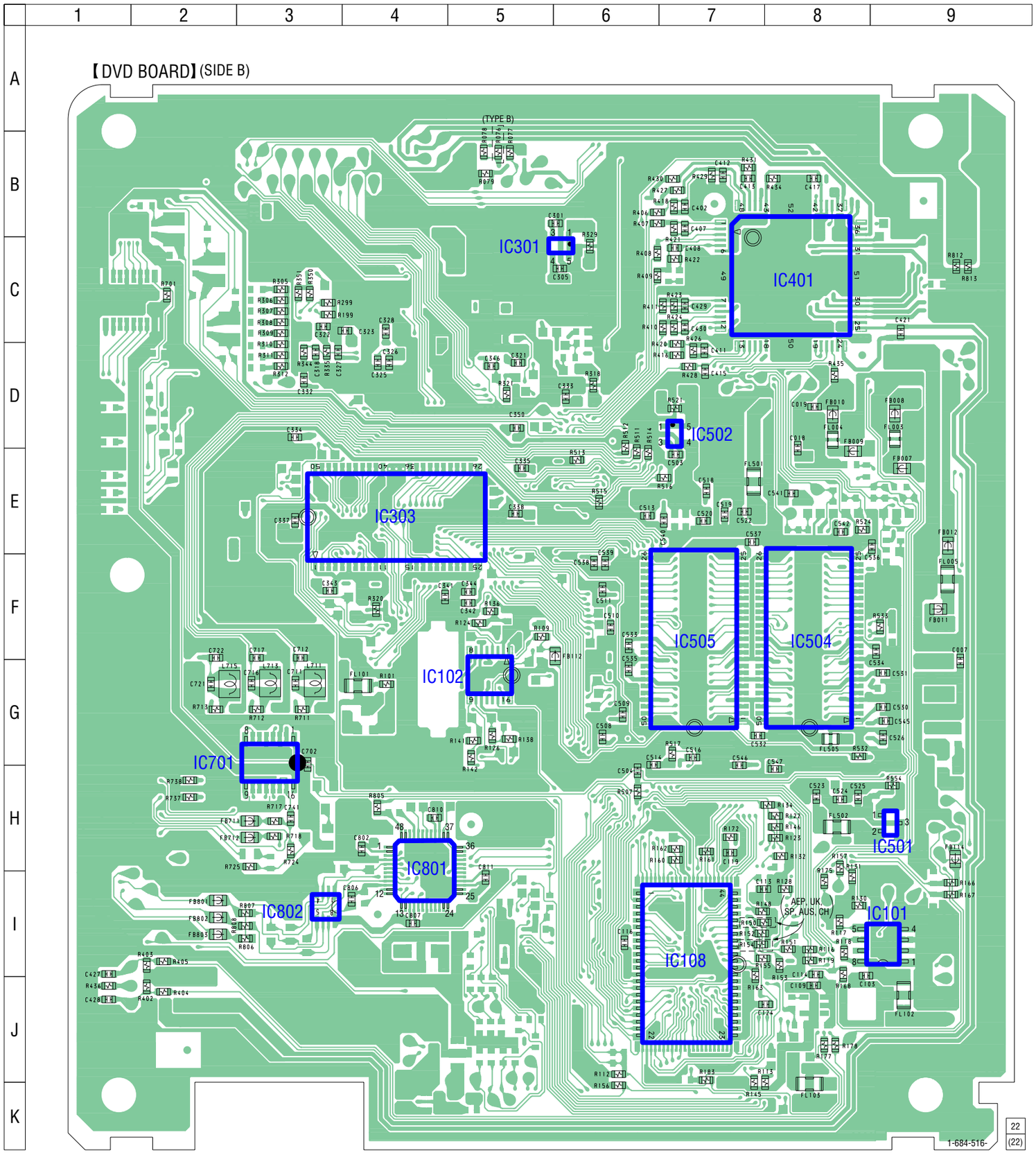


- **Semiconductor Location**

Ref. No.	Location
IC103	I-4
IC302	D-7
IC503	F-4
IC006	D-4

6-29. PRINTED WIRING BOARD – DVD Board (Side B) (Suffix-22) –

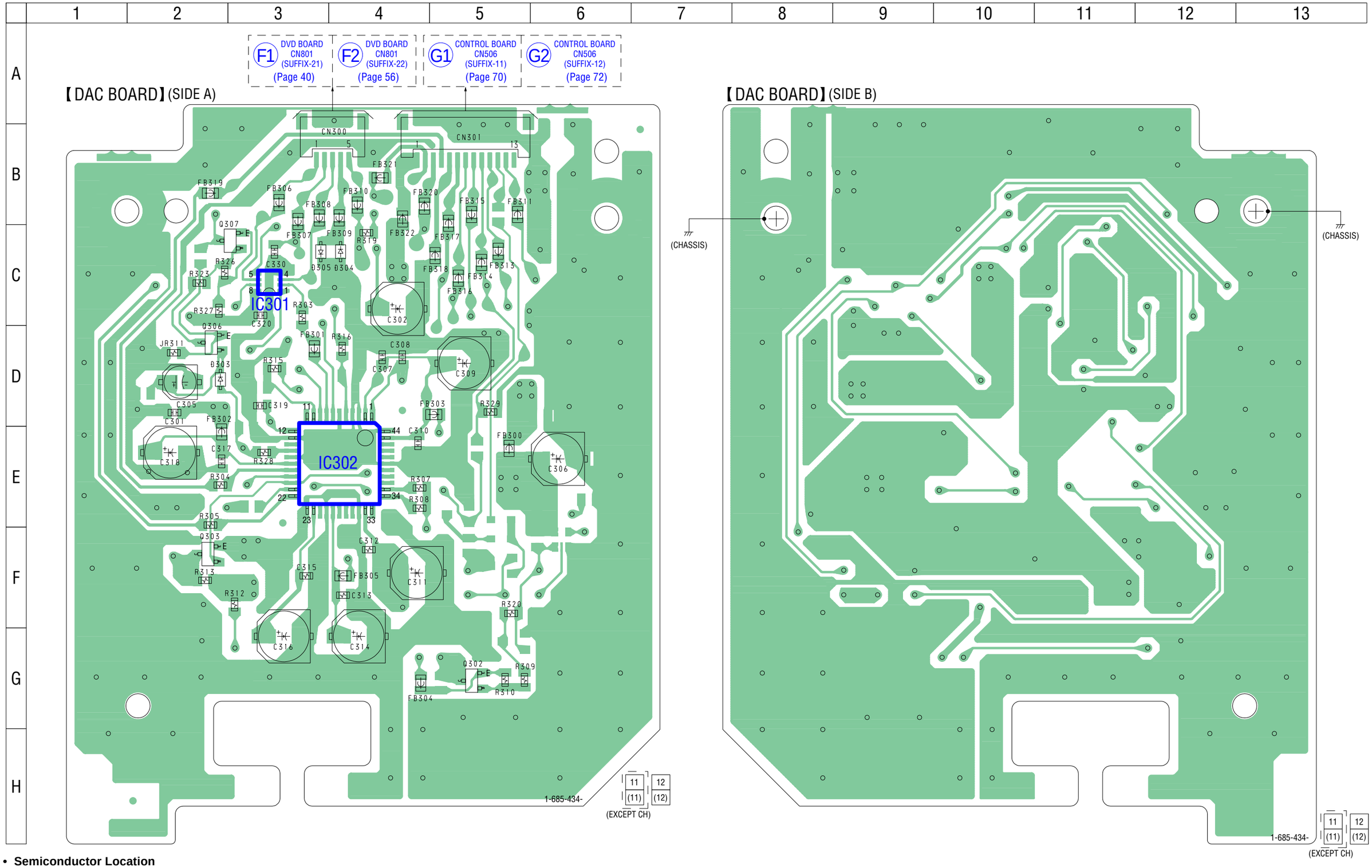
• See page 35 for Circuit Boards Location. • Refer to servicing notes (page 8) for discrimination of TYPE A/B.



- **Semiconductor Location**

Ref. No.	Location
IC101	I-9
IC102	G-5
IC108	I-7
IC301	C-6
IC303	E-4
IC401	C-8
IC501	H-9
IC502	D-7
IC504	F-8
IC505	F-7
IC701	G-3
IC801	H-4
IC802	I-3

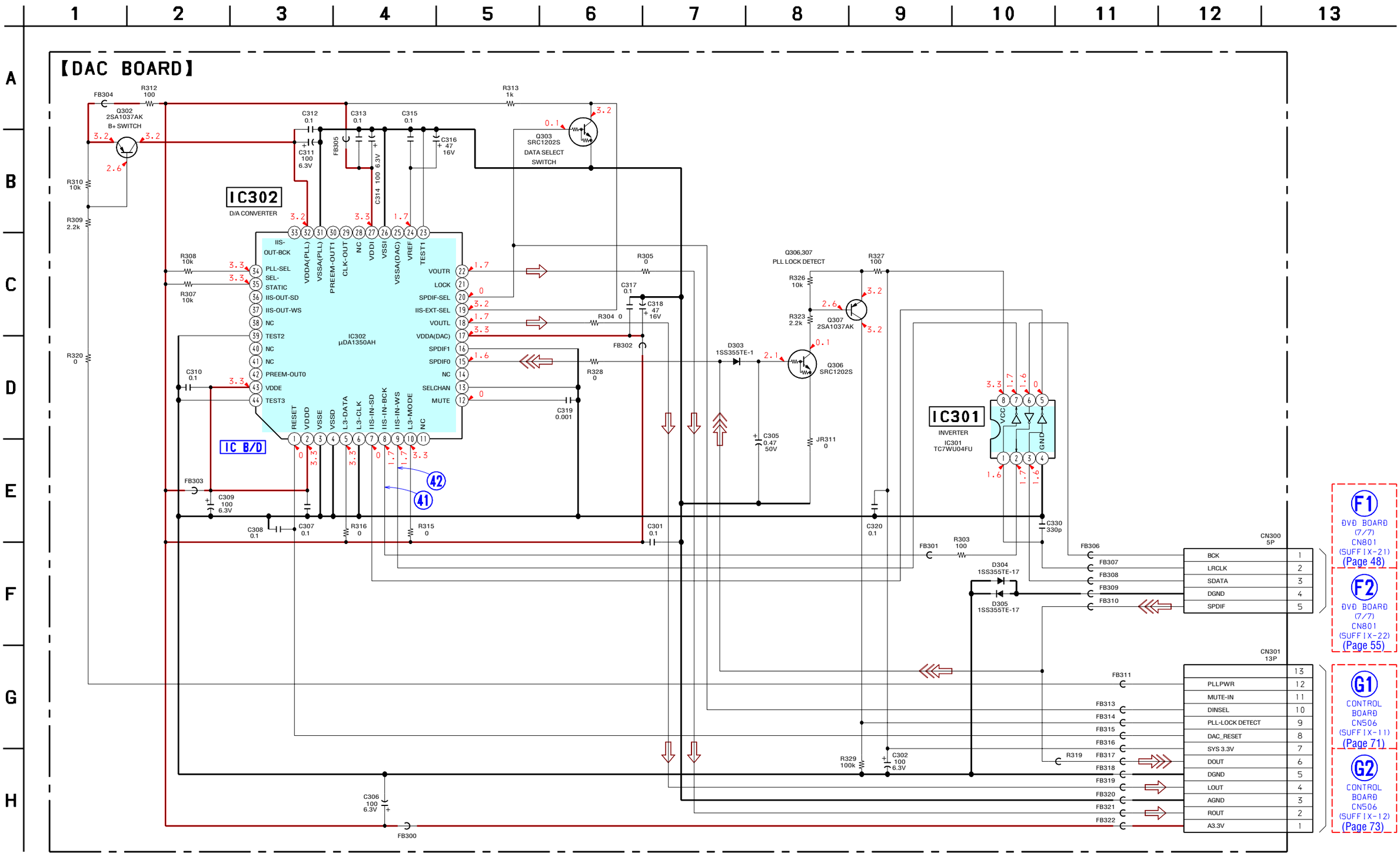
6-30. PRINTED WIRING BOARD – DAC Board – • See page 35 for Circuit Boards Location.



- **Semiconductor Location**

Ref. No.	Location	Ref. No.	Location
D303	D-2	Q302	G-5
D304	C-4	Q303	F-2
D305	C-3	Q306	D-2
		Q307	C-3
IC301	C-3		
IC302	E-4		

6-31. SCHEMATIC DIAGRAM – DAC Board – • See page 82 for Waveforms. • See page 85 for IC Block Diagram.



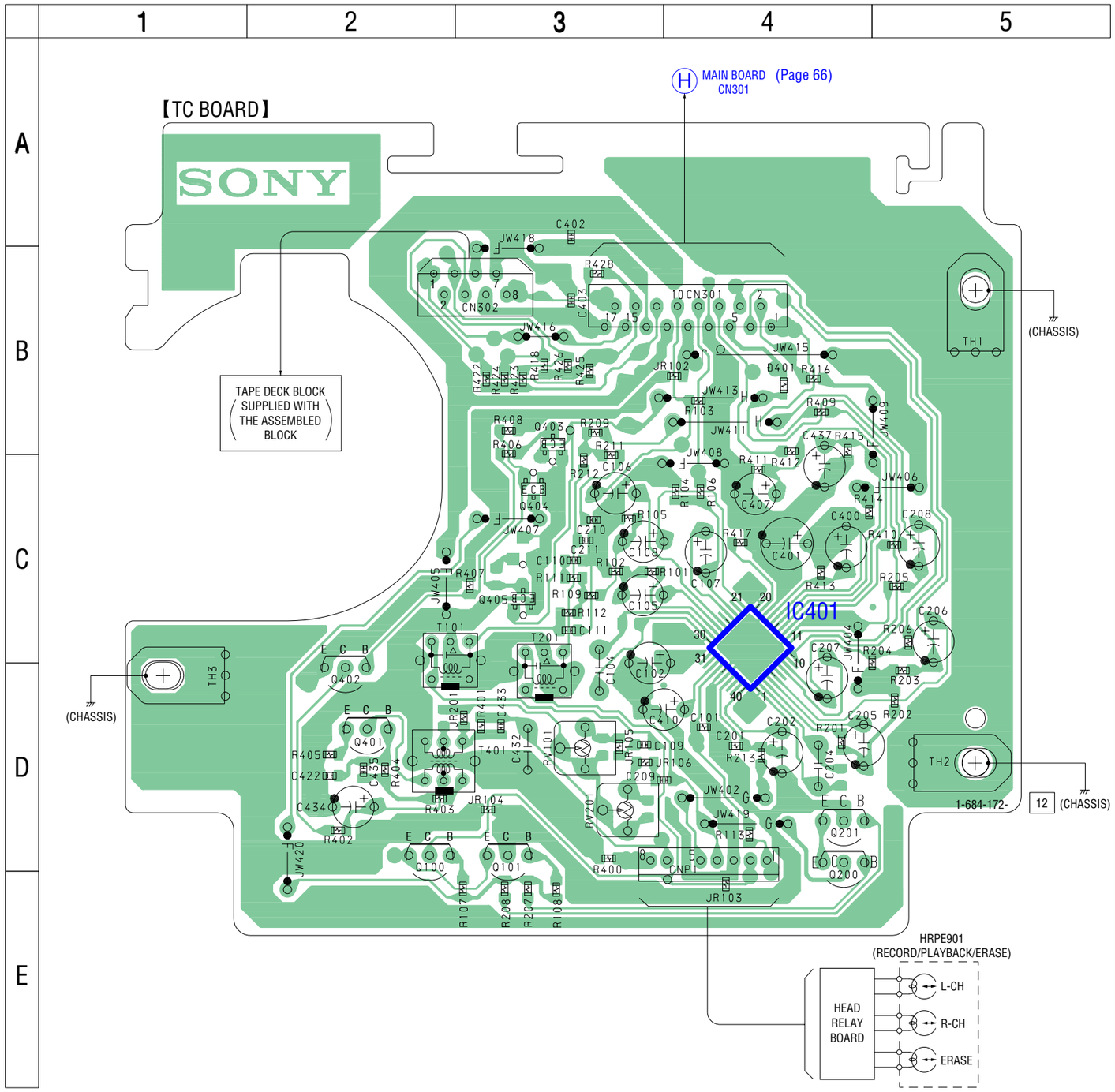
• Voltages and waveforms are dc with respect to ground under no-signal conditions.
no mark : DVD PLAY

6-32. PRINTED WIRING BOARD – TC Board (Suffix-12) –

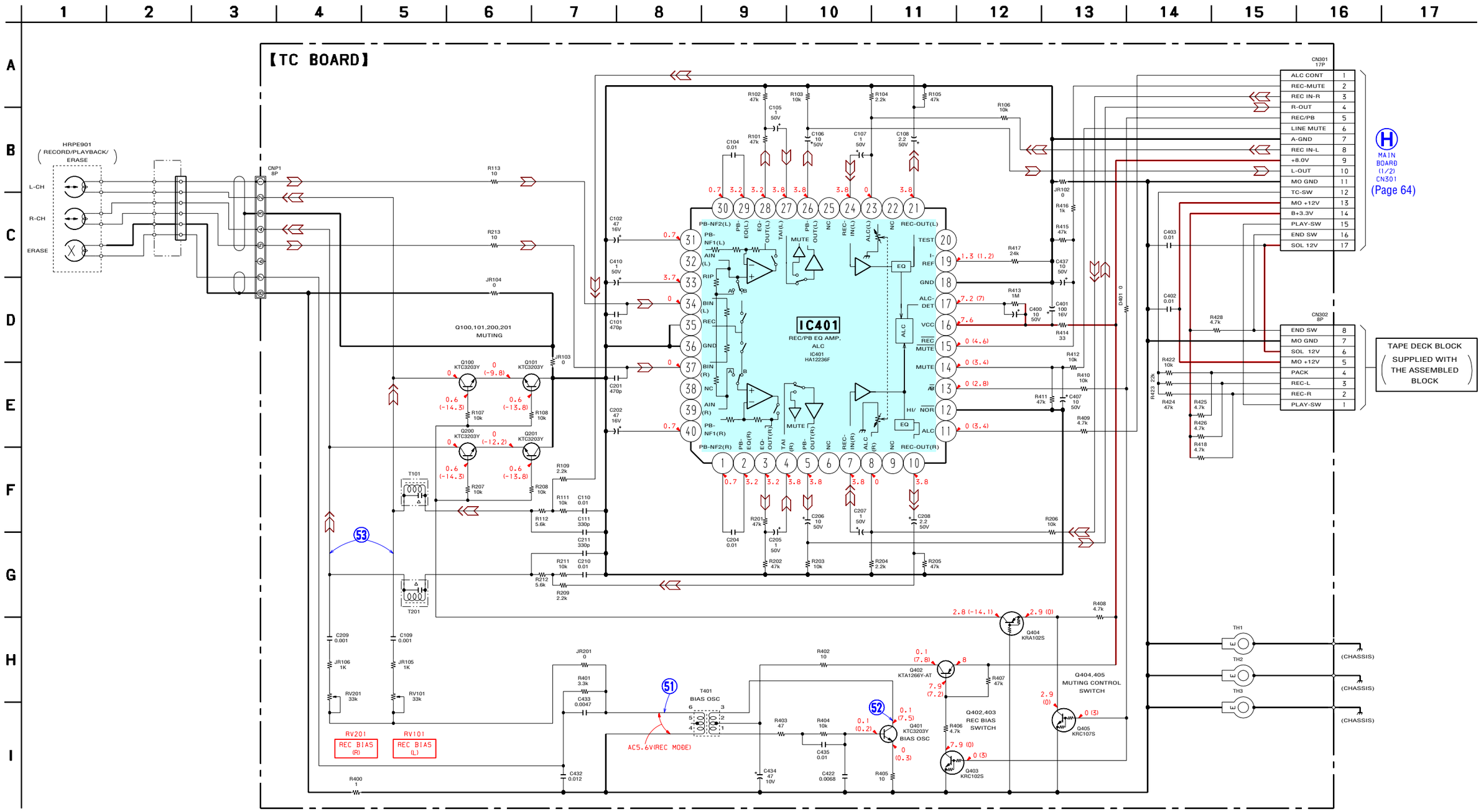
• See page 35 for Circuit Boards Location.

• **Semiconductor Location**

Ref. No.	Location
IC401	C-4
Q100	D-2
Q101	D-3
Q200	D-4
Q201	D-4
Q401	D-2
Q402	D-2
Q403	B-3
Q404	C-3
Q405	C-3



6-33. SCHEMATIC DIAGRAM – TC Board (Suffix-12) – • See page 82 for Waveforms.



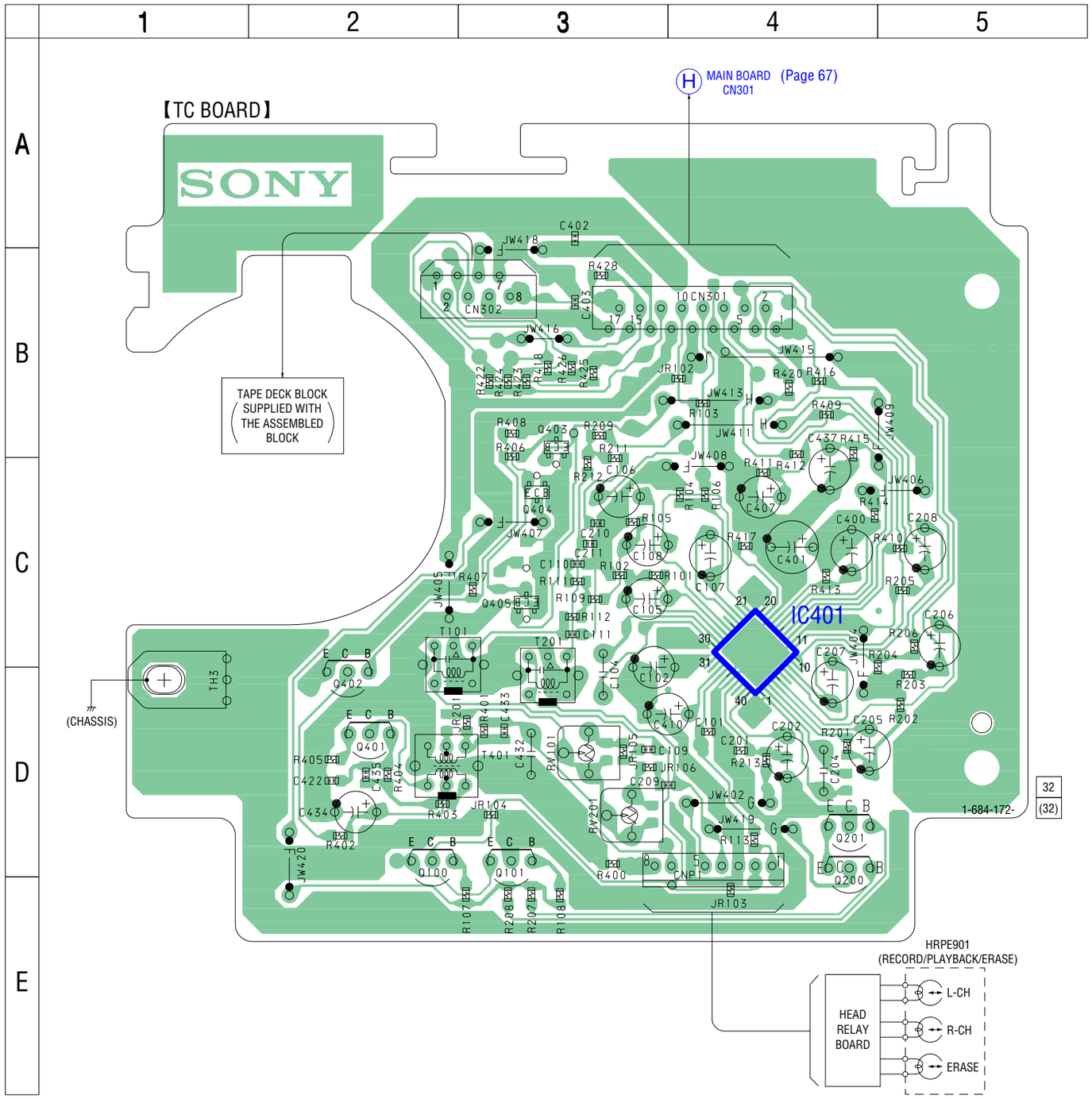
• Voltages and waveforms are dc with respect to ground under no-signal conditions.
no mark : TAPE PLAY
( ) : REC

6-34. PRINTED WIRING BOARD – TC Board (Suffix-32) –

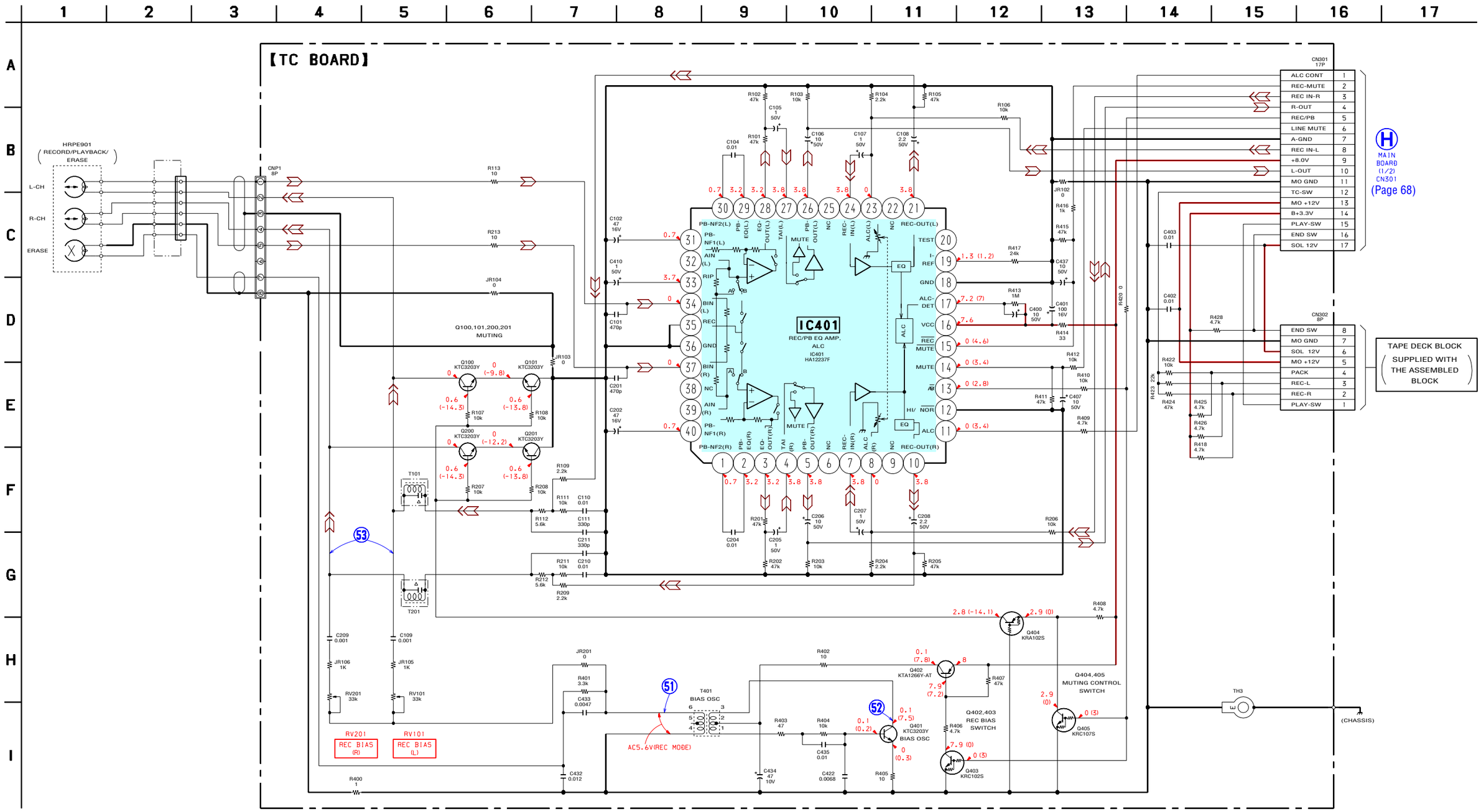
• See page 35 for Circuit Boards Location.

• **Semiconductor Location**

Ref. No.	Location
IC401	C-4
Q100	D-2
Q101	D-3
Q200	D-4
Q201	D-4
Q401	D-2
Q402	D-2
Q403	B-3
Q404	C-3
Q405	C-3

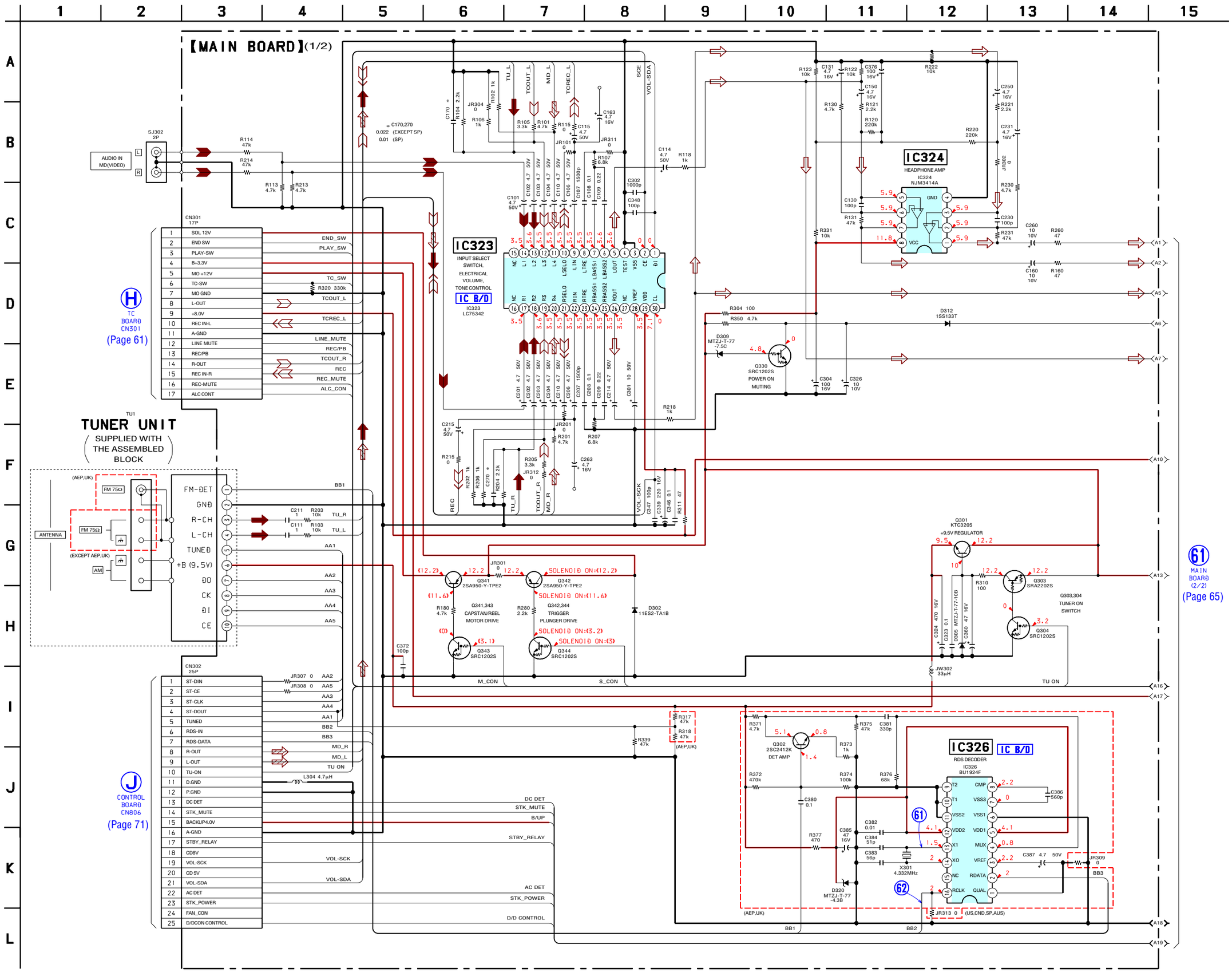


6-35. SCHEMATIC DIAGRAM – TC Board (Suffix-32) – • See page 82 for Waveforms.



- Voltages and waveforms are dc with respect to ground under no-signal conditions.
  no mark : TAPE PLAY
  ( ) : REC

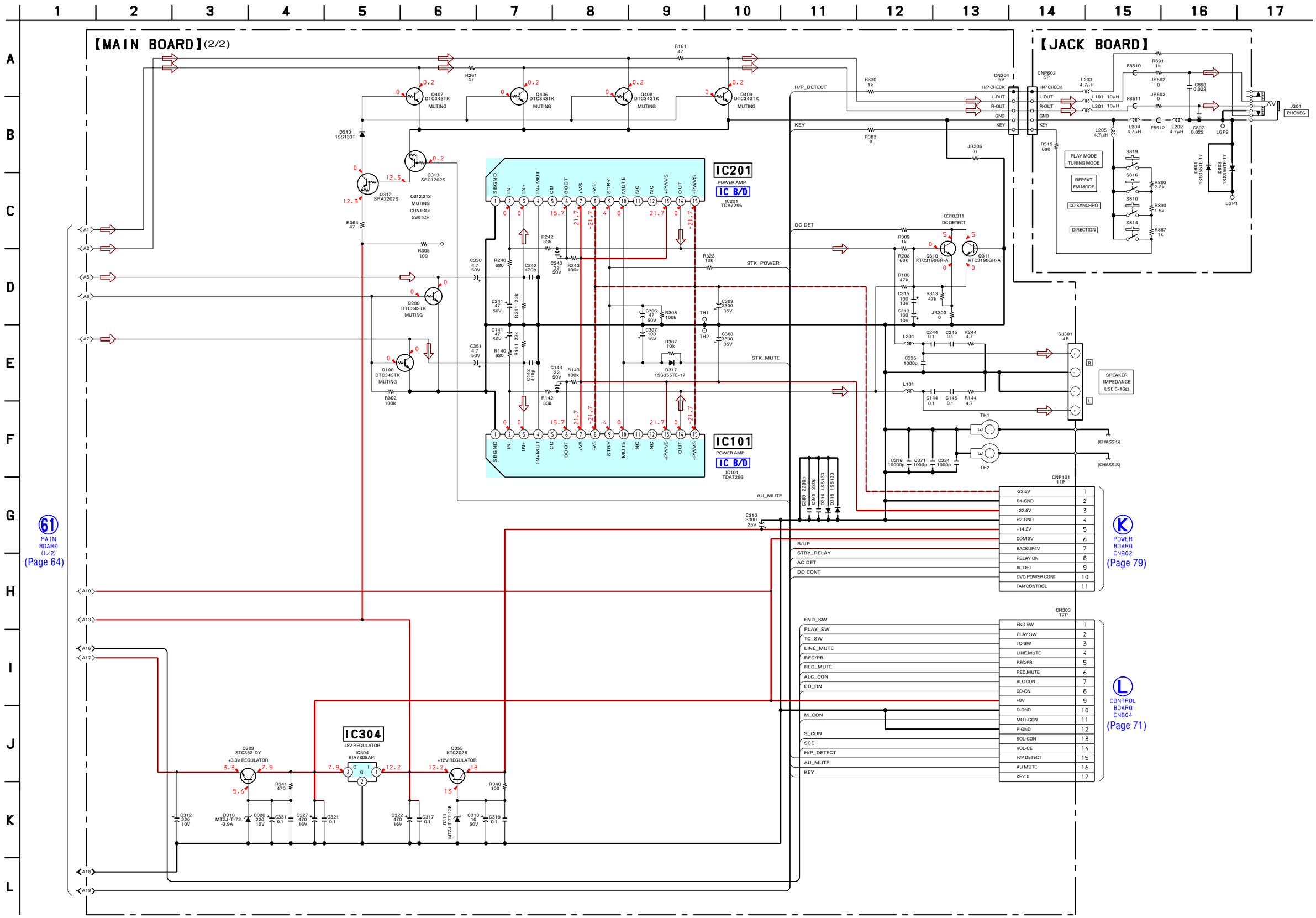
6-36. SCHEMATIC DIAGRAM – MAIN Board (1/2) (Suffix-14) – • See page 82 for Waveforms. • See page 85 for IC Block Diagrams.



• Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
no mark : TUNER (FM/AM)

( ) : DVD/CD PLAY
⟨⟨ ⟩⟩ : TAPE PLAY

6-37. SCHEMATIC DIAGRAM – MAIN (2/2) (Suffix-14)/JACK (Suffix-11) Boards – • See page 85 for IC Block Diagrams.

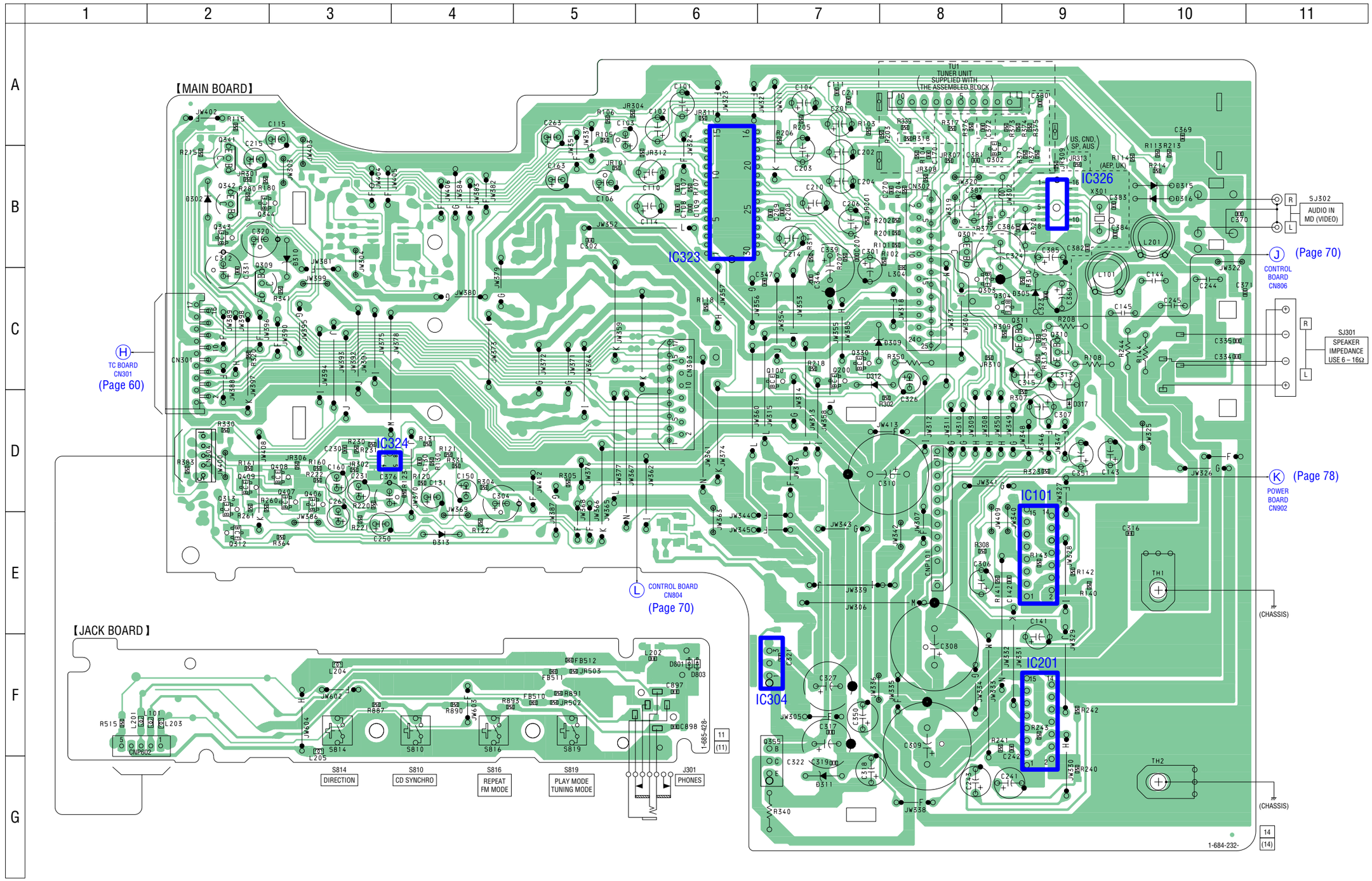


• Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
no mark : TUNER (FM/AM)

6-38. PRINTED WIRING BOARDS – MAIN (Suffix-14)/JACK (Suffix-11) Boards – • See page 35 for Circuit Boards Location.

- **Semiconductor Location**

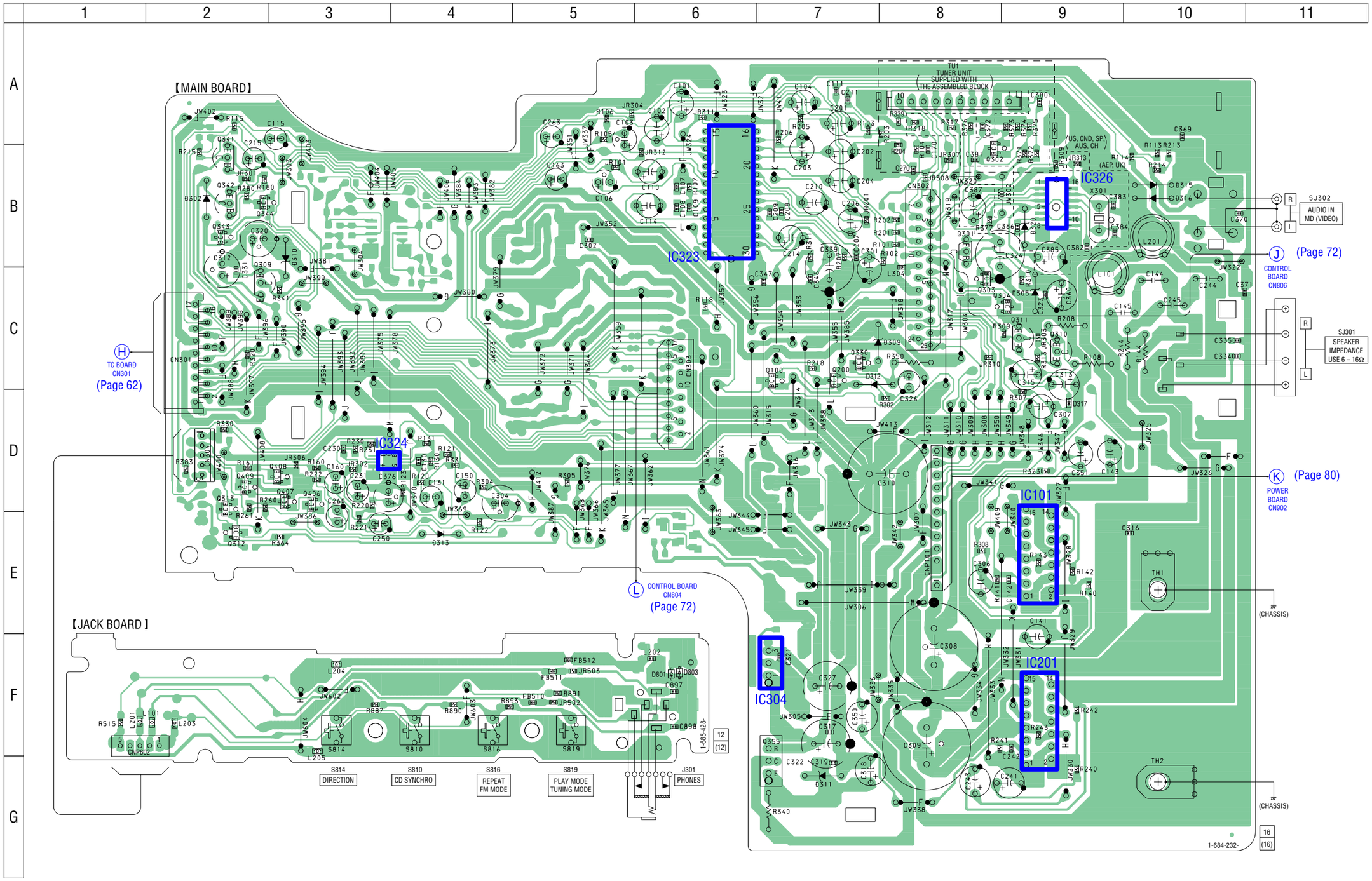
Ref. No.	Location
D302	B-2
D305	C-9
D309	C-8
D310	B-3
D311	G-7
D312	C-7
D313	E-4
D315	B-10
D316	B-10
D317	D-9
D320	B-9
D801	F-6
D803	F-6
IC101	E-9
IC201	F-9
IC304	F-7
IC323	B-6
IC324	D-3
IC326	B-9
Q100	C-7
Q200	C-7
Q301	B-8
Q302	B-8
Q303	C-8
Q304	C-9
Q309	C-2
Q310	C-9
Q311	C-9
Q312	E-2
Q313	D-2
Q330	C-7
Q341	B-2
Q342	B-2
Q343	B-2
Q344	B-2
Q355	G-7
Q406	D-3
Q407	D-3
Q408	D-3
Q409	D-2



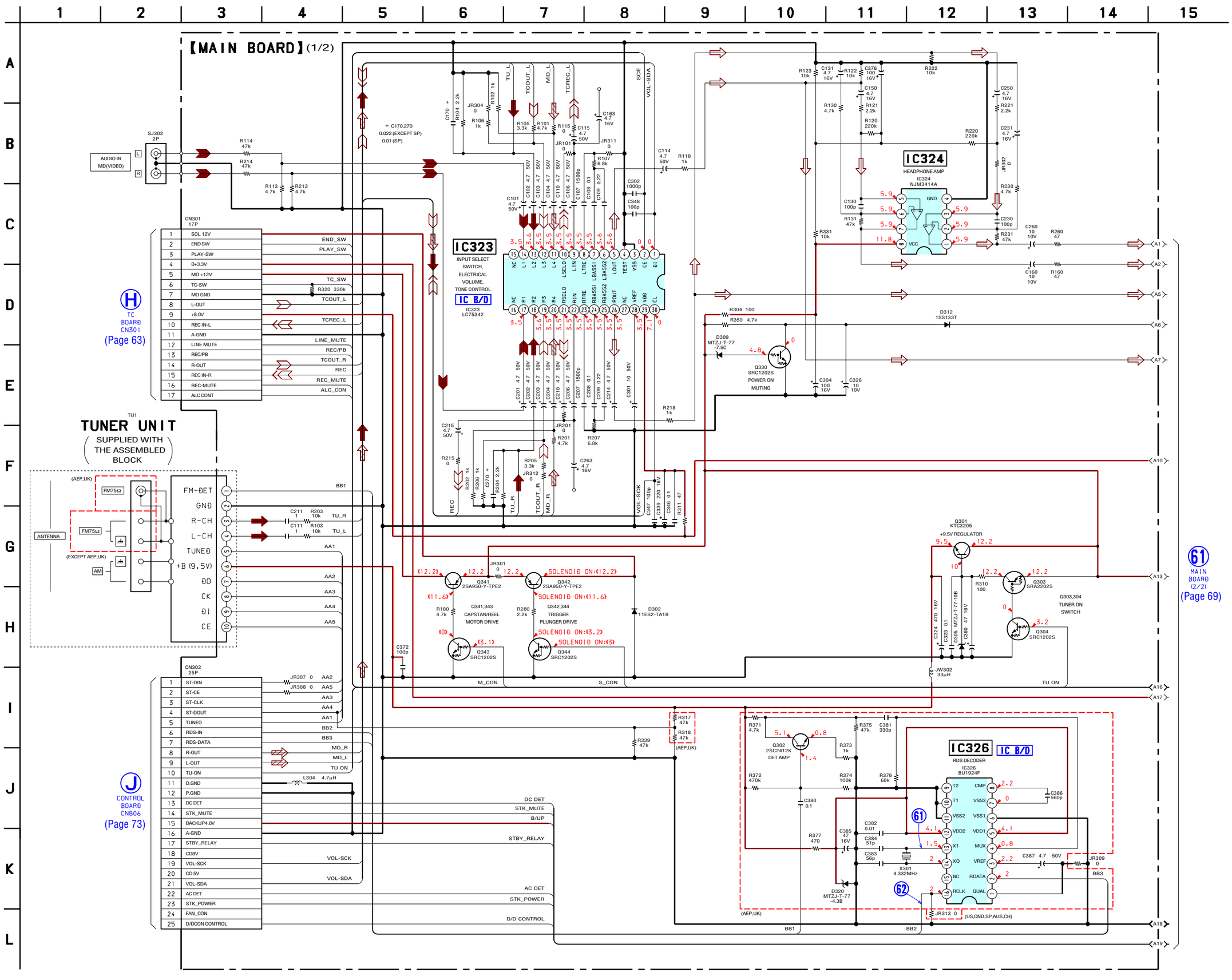
6-39. PRINTED WIRING BOARDS – MAIN (Suffix-16)/JACK (Suffix-12) Boards – • See page 35 for Circuit Boards Location.

- **Semiconductor Location**

Ref. No.	Location
D302	B-2
D305	C-9
D309	C-8
D310	B-3
D311	G-7
D312	C-7
D313	E-4
D315	B-10
D316	B-10
D317	D-9
D320	B-9
D801	F-6
D803	F-6
IC101	E-9
IC201	F-9
IC304	F-7
IC323	B-6
IC324	D-3
IC326	B-9
Q100	C-7
Q200	C-7
Q301	B-8
Q302	B-8
Q303	C-8
Q304	C-9
Q309	C-2
Q310	C-9
Q311	C-9
Q312	E-2
Q313	D-2
Q330	C-7
Q341	B-2
Q342	B-2
Q343	B-2
Q344	B-2
Q355	G-7
Q406	D-3
Q407	D-3
Q408	D-3
Q409	D-2



6-40. SCHEMATIC DIAGRAM – MAIN Board (1/2) (Suffix-16) – • See page 82 for Waveforms. • See page 85 for IC Block Diagrams.

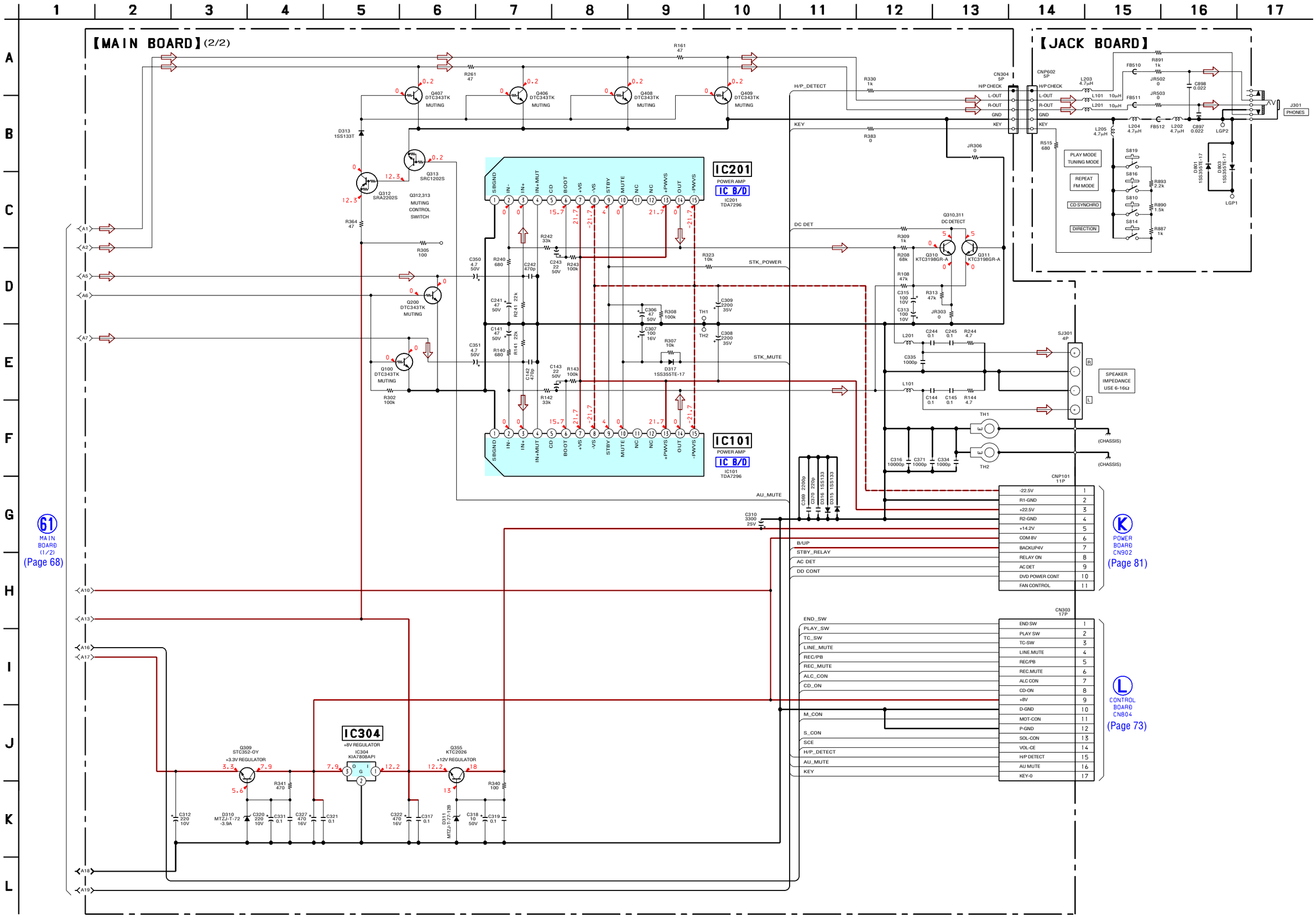


• Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
no mark : TUNER (FM/AM)

( ) : DVD/CD PLAY
⟨⟨ ⟩⟩ : TAPE PLAY

6-41. SCHEMATIC DIAGRAM – MAIN (2/2) (Suffix-16)/JACK (Suffix-12) Boards –

• See page 85 for IC Block Diagrams.

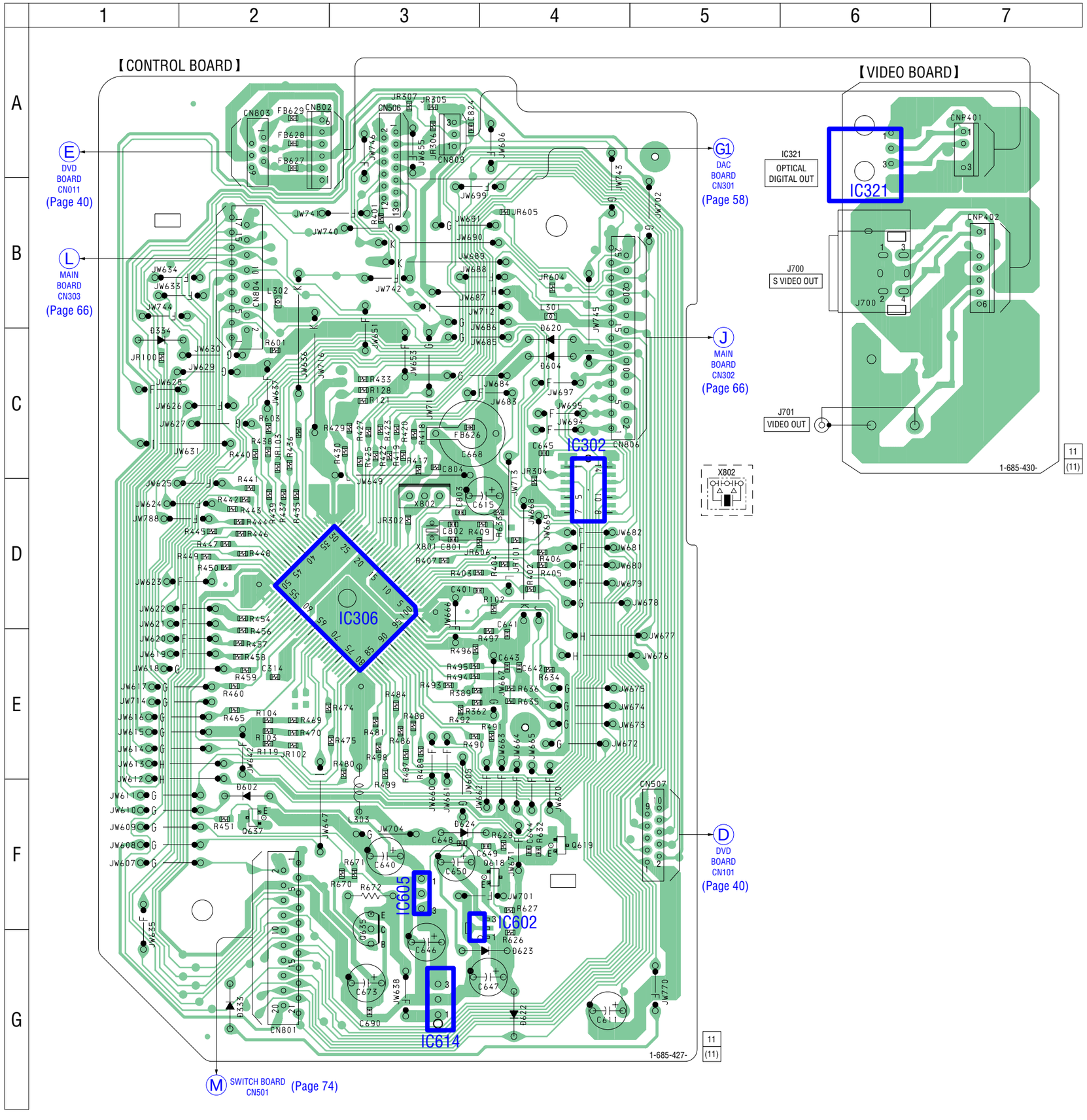


• Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
no mark : TUNER (FM/AM)

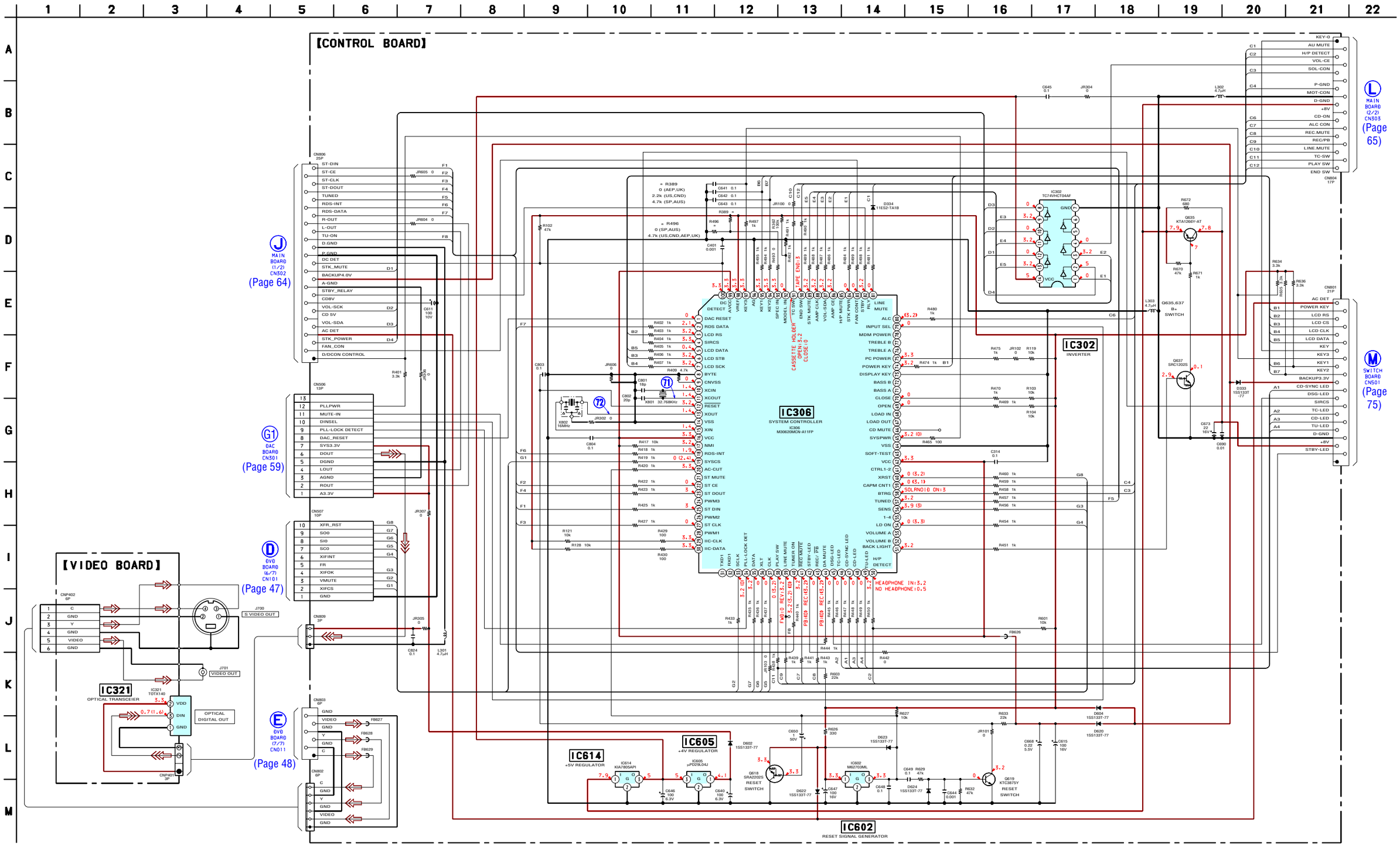
6-42. PRINTED WIRING BOARDS – CONTROL (Suffix-11)/VIDEO Boards – • See page 35 for Circuit Boards Location.

- **Semiconductor Location**

Ref. No.	Location
D333	G-2
D334	C-1
D602	F-2
D604	C-4
D620	C-4
D622	G-4
D623	G-4
D624	F-3
IC302	D-4
IC306	D-3
IC321	A-6
IC602	F-3
IC605	F-3
IC614	G-3
Q618	F-4
Q619	F-4
Q635	F-3
Q637	F-2



6-43. SCHEMATIC DIAGRAM – CONTROL (Suffix-11)/VIDEO Boards – • See page 82 for Waveforms.

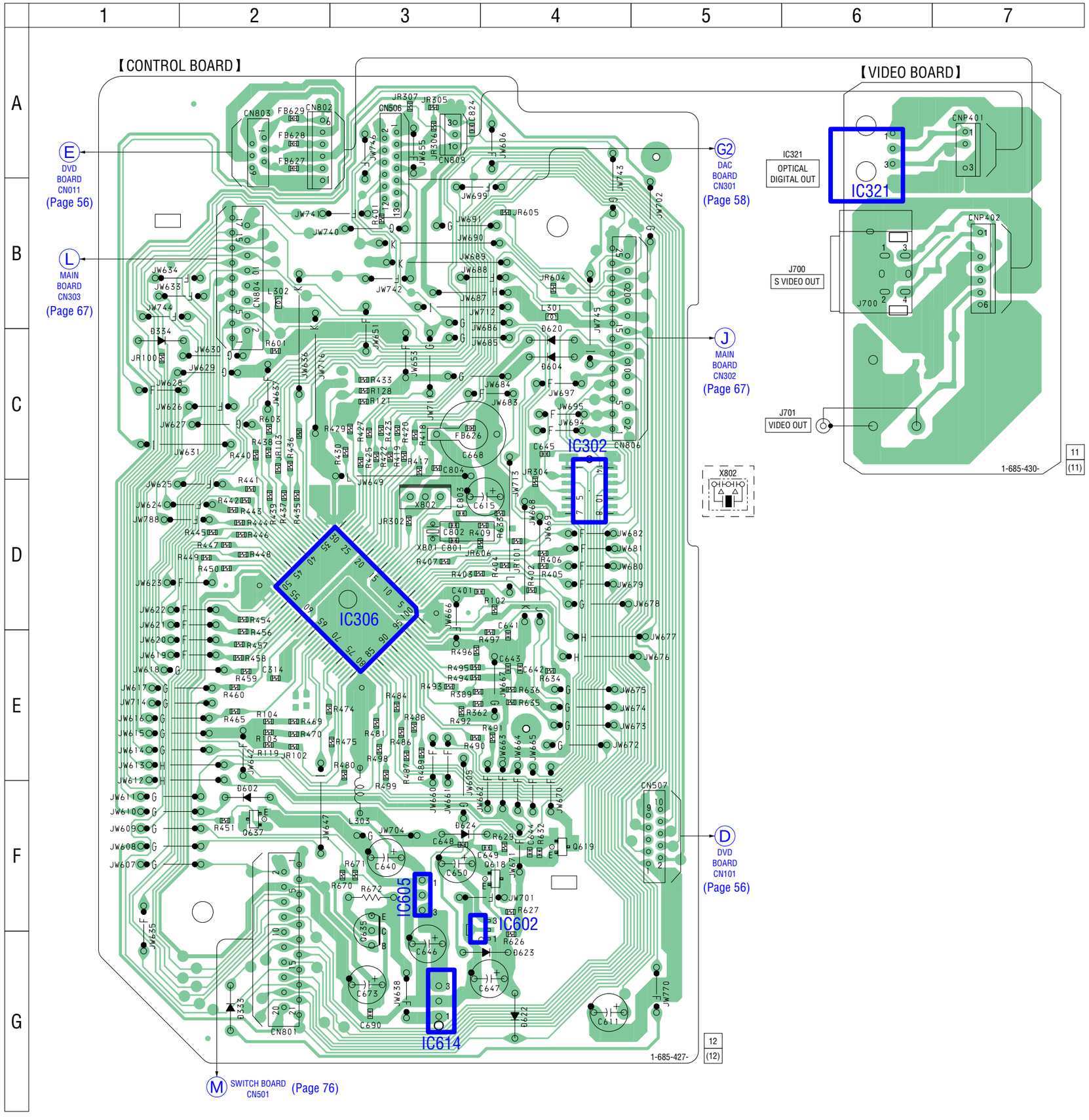


- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark : TUNER (FM/AM)
  ( ) : DVD/CD PLAY
  ⟨⟨ ⟩⟩ : TAPE PLAY

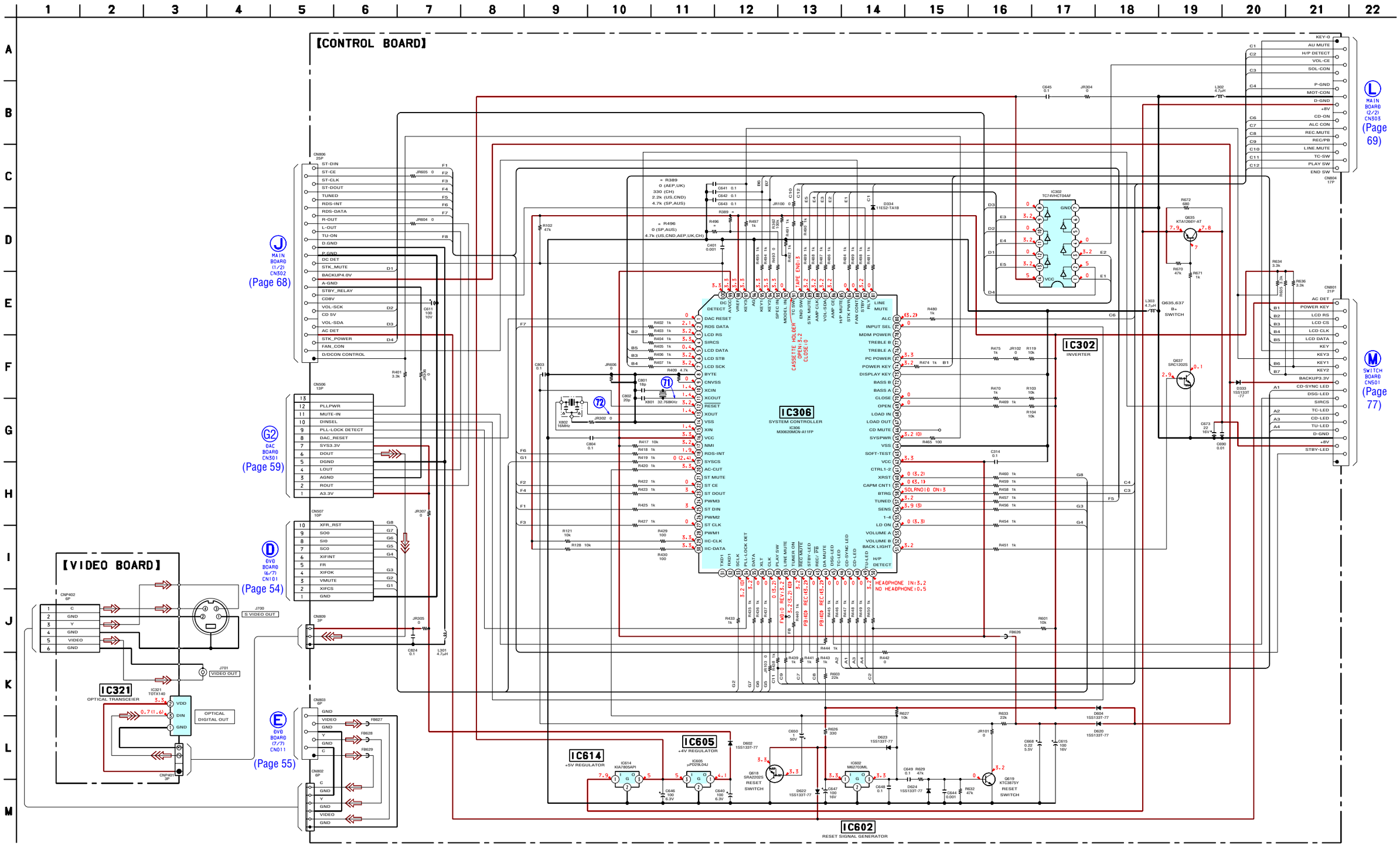
6-44. PRINTED WIRING BOARDS – CONTROL (Suffix-12)/VIDEO Boards – • See page 35 for Circuit Boards Location.

- **Semiconductor Location**

Ref. No.	Location
D333	G-2
D334	C-1
D602	F-2
D604	C-4
D620	C-4
D622	G-4
D623	G-4
D624	F-3
IC302	D-4
IC306	D-3
IC321	A-6
IC602	F-3
IC605	F-3
IC614	G-3
Q618	F-4
Q619	F-4
Q635	F-3
Q637	F-2



6-45. SCHEMATIC DIAGRAM – CONTROL (Suffix-12)/VIDEO Boards – • See page 82 for Waveforms.



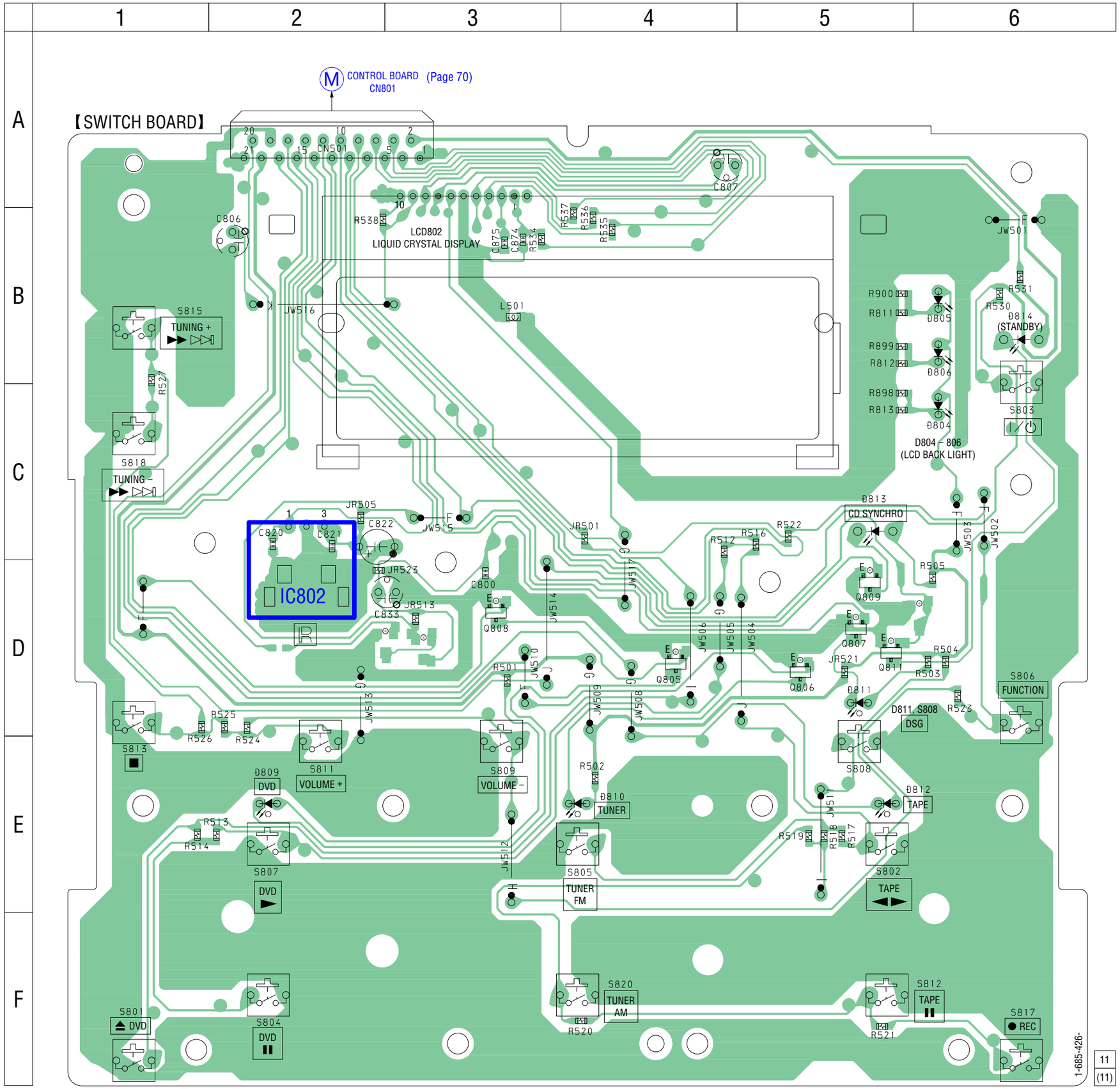
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark : TUNER (FM/AM)
  ( ) : DVD/CD PLAY
  ⟨⟨ ⟩⟩ : TAPE PLAY

6-46. PRINTED WIRING BOARD – SWITCH Board (Suffix-11) –

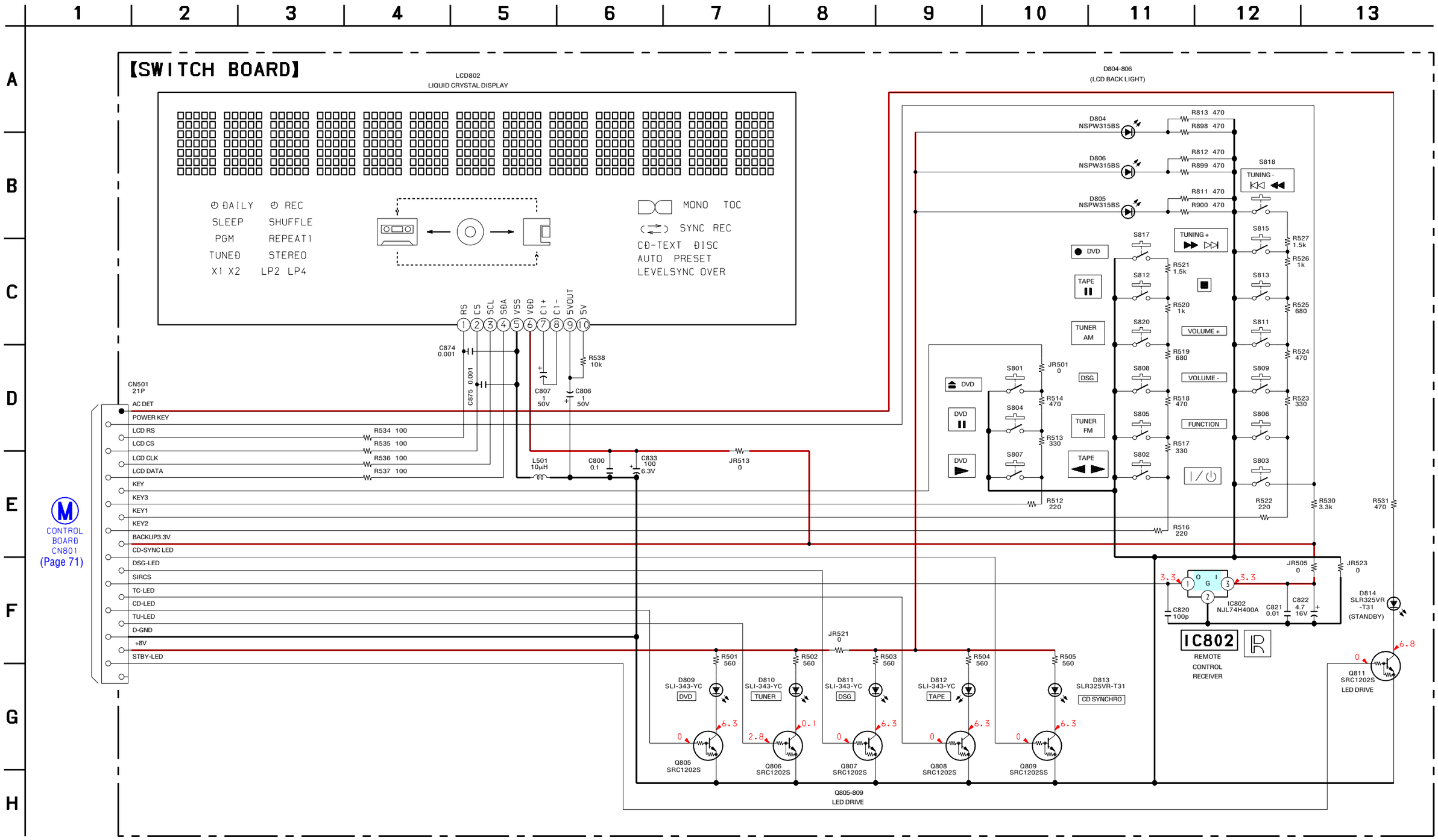
• See page 35 for Circuit Boards Location.

- **Semiconductor Location**

Ref. No.	Location
D804	C-6
D805	B-6
D806	B-6
D809	E-2
D810	E-4
D811	D-5
D812	E-5
D813	C-5
D814	B-6
IC802	D-2
Q805	D-4
Q806	D-5
Q807	D-5
Q808	D-3
Q809	D-5
Q811	D-5



6-47. SCHEMATIC DIAGRAM – SWITCH Board (Suffix-11) –



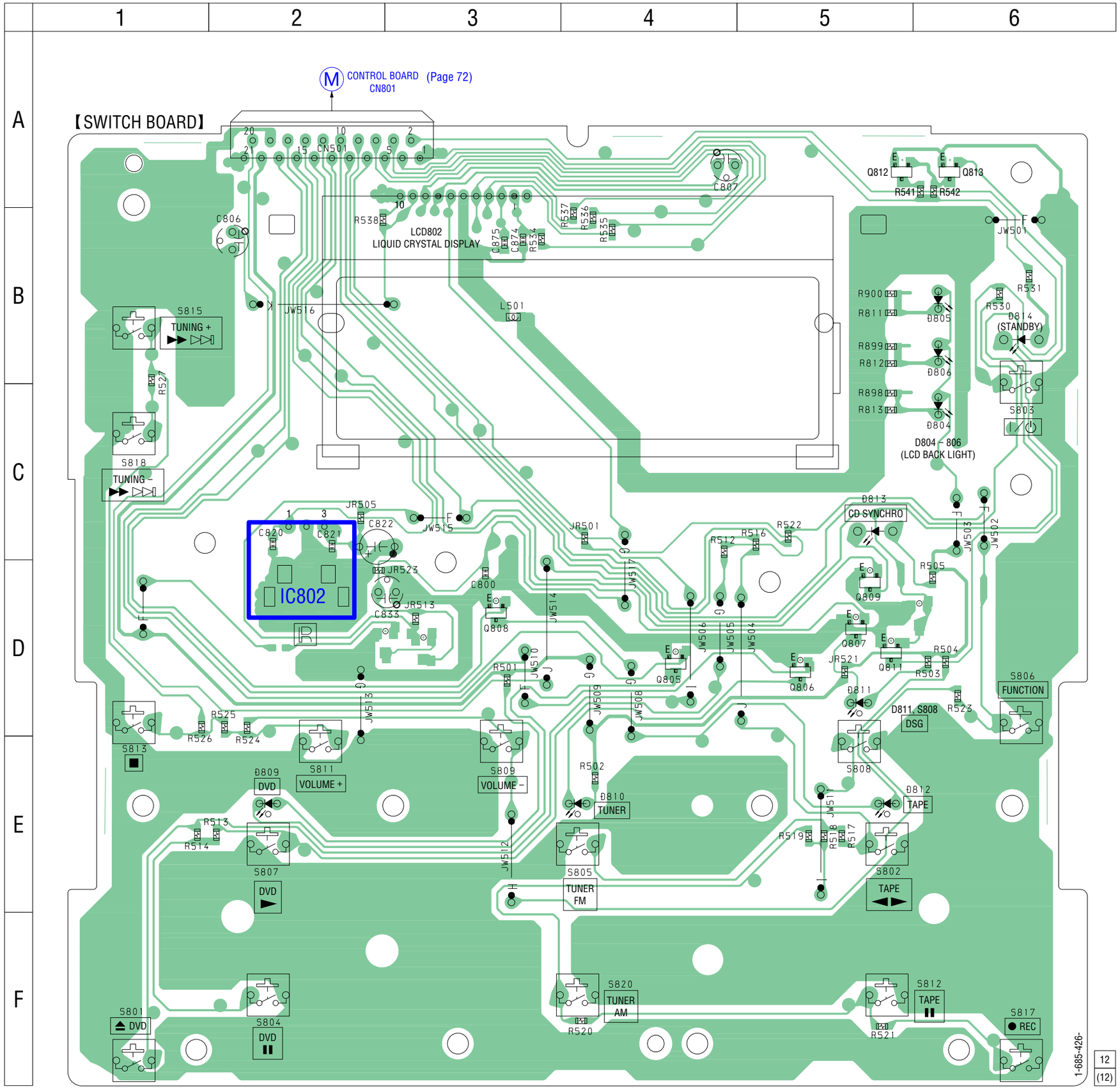
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark : TUNER (FM/AM)

6-48. PRINTED WIRING BOARD – SWITCH Board (Suffix-12) –

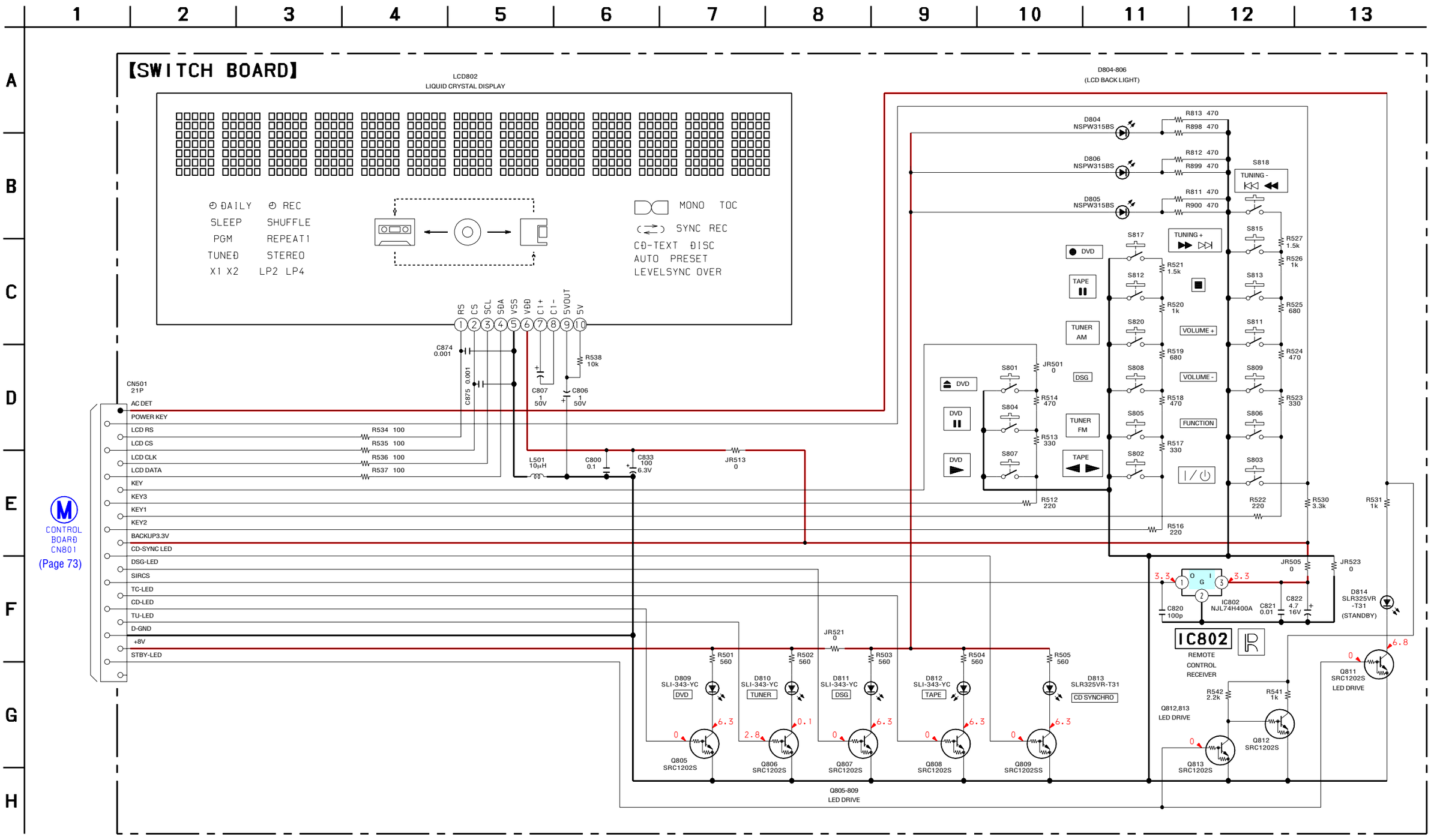
• See page 35 for Circuit Boards Location.

- **Semiconductor Location**

Ref. No.	Location
D802	B-6
D804	C-6
D806	B-6
D809	E-2
D810	E-4
D811	D-5
D812	E-5
D813	C-5
D814	B-6
IC802	D-2
Q805	D-4
Q806	D-5
Q807	D-5
Q808	D-3
Q809	D-5
Q811	D-5
Q812	A-5
Q813	A-6



6-49. SCHEMATIC DIAGRAM – SWITCH Board (Suffix-12) –



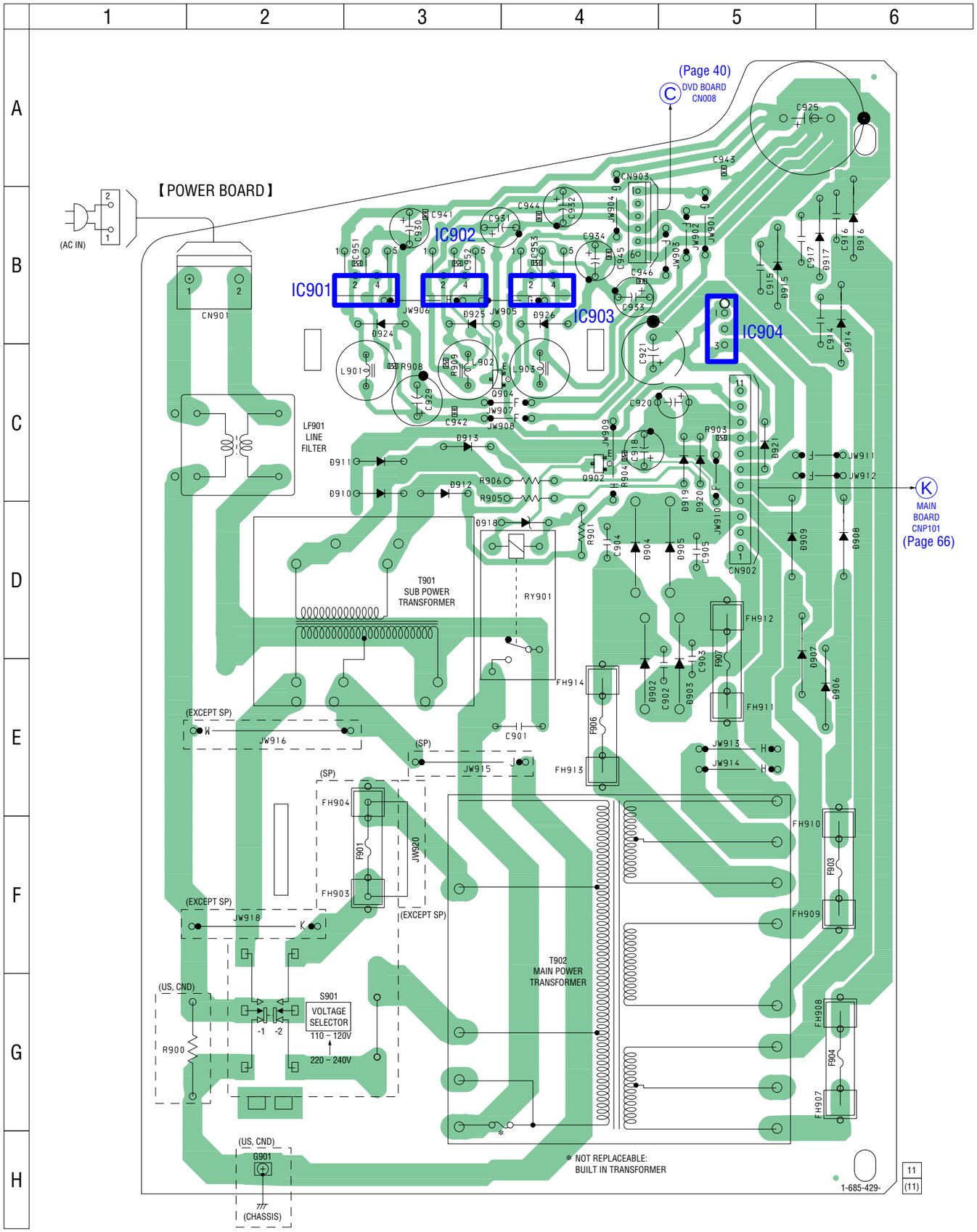
- Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
  no mark : TUNER (FM/AM)

6-50. PRINTED WIRING BOARD – POWER Board (Suffix-11) –

• See page 35 for Circuit Boards Location.

- **Semiconductor Location**

Ref. No.	Location
D902	E-4
D903	E-5
D904	D-4
D905	D-5
D906	E-6
D907	D-5
D908	D-6
D909	D-5
D910	C-3
D911	C-3
D912	C-3
D913	C-3
D914	B-6
D915	B-5
D916	B-6
D917	B-6
D918	D-4
D919	C-5
D920	C-5
D921	C-5
D924	B-3
D925	B-3
D926	B-4
IC901	B-3
IC902	B-3
IC903	B-4
IC904	B-5
Q902	C-4
Q904	C-3



6-51. SCHEMATIC DIAGRAM – POWER Board (Suffix-11) –

【POWER BOARD】

* F903,904,906,907
2.5A 125V (US,CND)
T2.5AL 250V (AEP,UK,SP,AUS)

T902
MAIN POWER
TRANSFOMER

* NOT REPLACEABLE:
BUILT IN TRANSFORMER

CN902
11P
-22.5V
R1-GND
+22.5V
R2-GND
+14.2V
COM 8V
BACKUP4V
RELAY ON
AC DET
DVD POWER CONT
FAN CONTROL

MAIN BOARD (2/2) CNP101 (Page 65)

IC904
μPC3504AHF
+4V REGULATOR

IC901
+12V REGULATOR
IC901
SI-8120JF

IC902
+5V REGULATOR
IC902
SI-8050JF

IC903
+3.3V REGULATOR
IC903
SI-8033JF

T901
SUB POWER
TRANSFOMER

S901
VOLTAGE
SELECTOR
110V-120V
220V-240V

F901
T1.6AL
250V

RY901

Q902
2SC2412
POWER ON/OFF
RELAY DRIVE

Q904
SRC1202SF
POWER
SWITCH

CN903
6P
M+12V
MGND
D+5V
DGND
D+3.3V
DGND

ĐVĐ BOARĐ (1/7) CN008 (Page 42)

CN901
2P
(AC IN)

LF901
LINE
FILTER

G901
(CHASSIS)

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

以阴影和⚠标志来识别的零部件在安全方面具有关键性。因此只能以规定号码的零部件来更换。

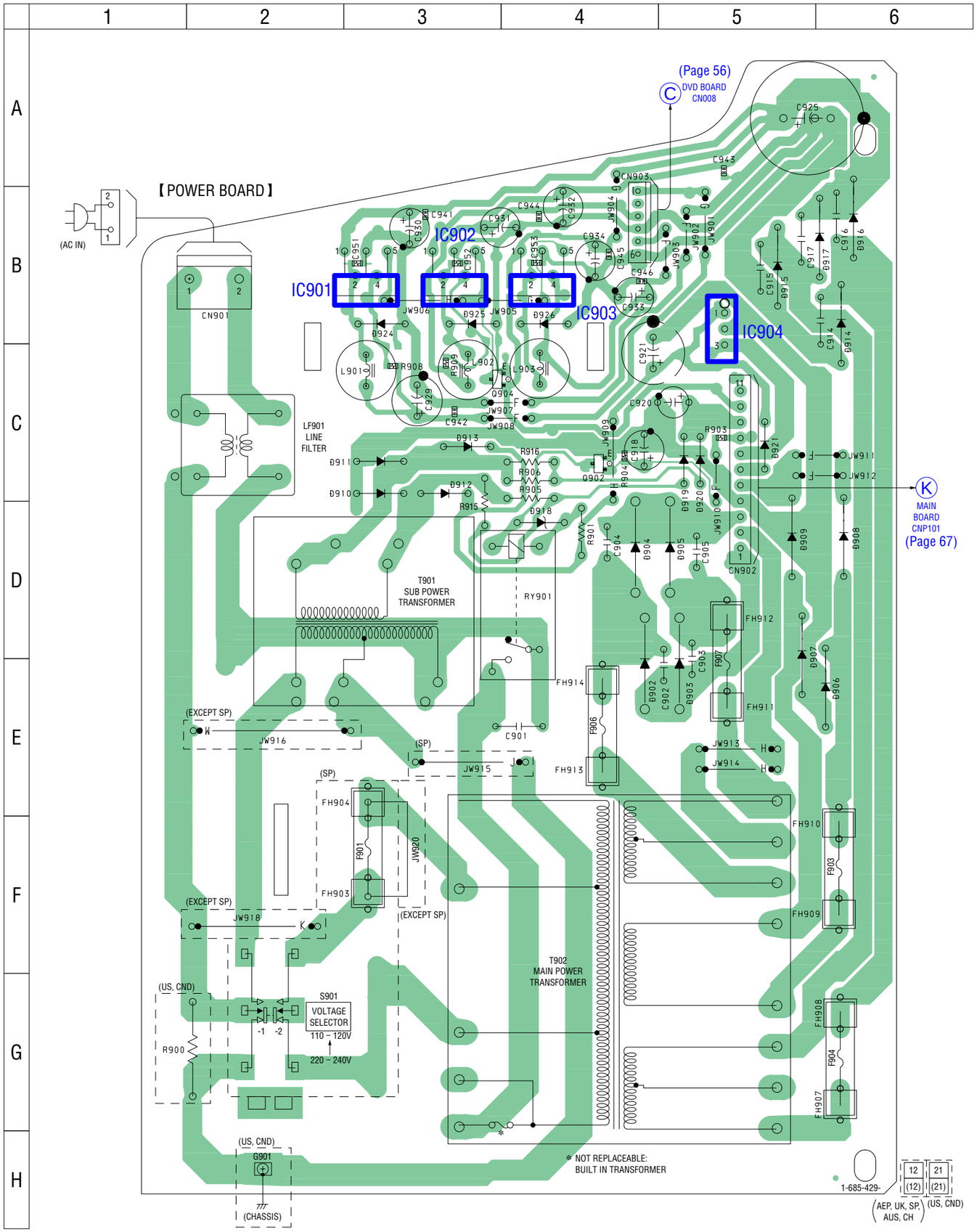
• Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
no mark : TUNER (FM/AM)

6-52. PRINTED WIRING BOARD – POWER Board (Suffix-12, -21) –

• See page 35 for Circuit Boards Location.

- **Semiconductor Location**

Ref. No.	Location
D902	E-4
D903	E-5
D904	D-4
D905	D-5
D906	E-6
D907	D-5
D908	D-6
D909	D-5
D910	C-3
D911	C-3
D912	C-3
D913	C-3
D914	B-6
D915	B-5
D916	B-6
D917	B-6
D918	D-4
D919	C-5
D920	C-5
D921	C-5
D924	B-3
D925	B-3
D926	B-4
IC901	B-3
IC902	B-3
IC903	B-4
IC904	B-5
Q902	C-4
Q904	C-3



6-53. SCHEMATIC DIAGRAM – POWER Board (Suffix-12, -21) –

【POWER BOARD】

CN902 11P
-22.5V
R1-GND
+22.5V
R2-GND
+14.2V
COM 8V
BACKUP4V
RELAY ON
AC DET
DVD POWER CONT
FAN CONTROL

MAIN BOARD (2/2) CNP101 (Page 69)

CN903 6P
M+12V
MGND
D+5V
DGND
D+3.3V
DGND

DVD BOARD (1/7) CN008 (Page 49)

* F903,904,906,907
2.5A 125V (US,CND)
T2.5AL 250V (AEP,UK,SP,AUS,CH)

T902 MAIN POWER TRANSFOMER

T901 SUB POWER TRANSFOMER

* NOT REPLACEABLE: BUILT IN TRANSFORMER

IC904 μPC3504AHF
IC904 +4V REGULATOR

IC901 +12V REGULATOR
IC901 SI-8120JF

IC902 +5V REGULATOR
IC902 SI-8050JF

IC903 +3.3V REGULATOR
IC903 SI-8033JF

Q902 2SC2412 POWER ON/OFF RELAY DRIVE

Q904 SRC1202SF POWER SWITCH

S901 VOLTAGE SELECTOR 110V-120V 220V-240V

LF901 LINE FILTER

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

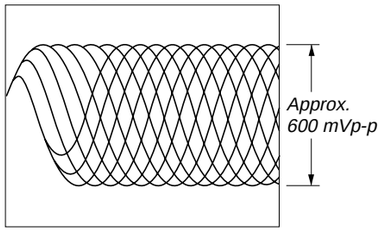
以阴影和⚠标志来识别的零部件在安全方面具有关键性。因此只能以规定号码的零部件来更换。

• Voltages and waveforms are dc with respect to ground under no-signal (detuned) conditions.
no mark : TUNER (FM/AM)

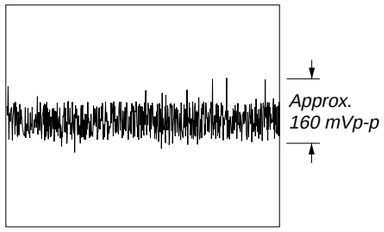
• **Waveforms**

– RF-240 Board –

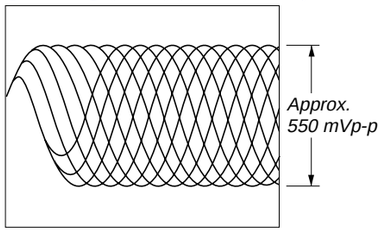
❶ IC001 ② (RF IN) (DVD Play Mode)



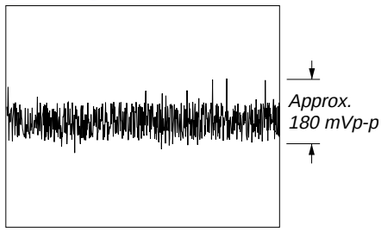
❸ IC001 ㊷ (FE) (DVD Play Mode)



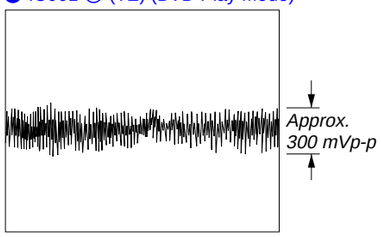
❶ IC001 ② (RF IN) (CD Play Mode)



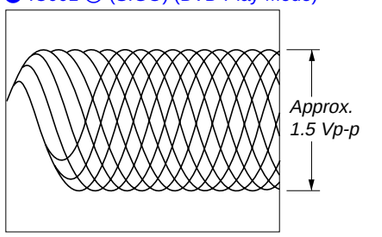
❸ IC001 ㊷ (FE) (CD Play Mode)



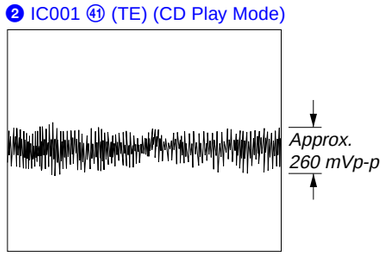
❷ IC001 ㊶ (TE) (DVD Play Mode)



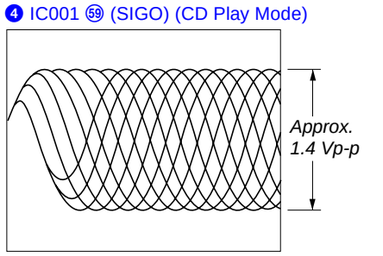
❹ IC001 ㊾ (SIGO) (DVD Play Mode)



❷ IC001 ㊶ (TE) (CD Play Mode)

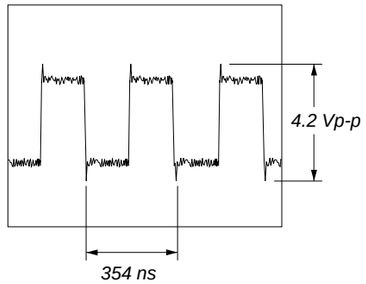


❹ IC001 ㊾ (SIGO) (CD Play Mode)

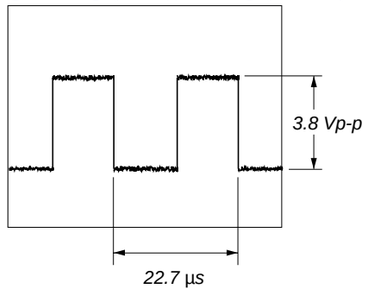


–DVD Board –

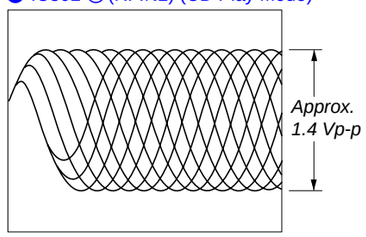
⓫ IC302 ㊸ (BCLK), IC503 ㉕ (CDBCKI)



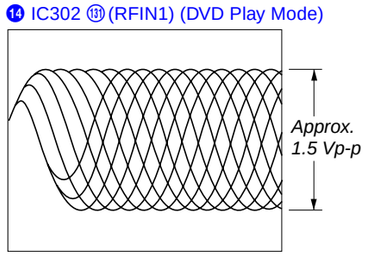
⓬ IC302 ㊺ (LRCK), IC503 ㉖ (CDLRKI)



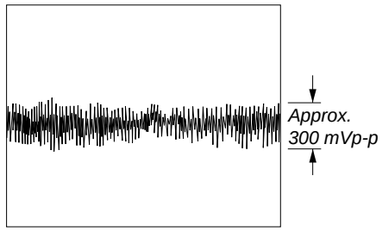
⓭ IC302 ⑫⑥ (RFIN2) (CD Play Mode)



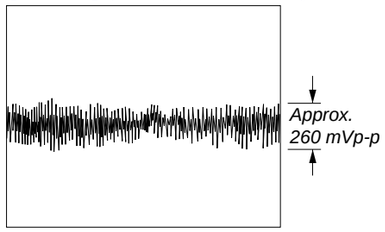
⓮ IC302 ⑬① (RFIN1) (DVD Play Mode)



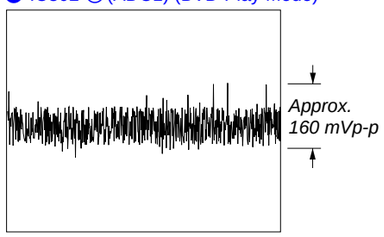
⓯ IC302 ⑬⑤ (ADC0) (DVD Play Mode)



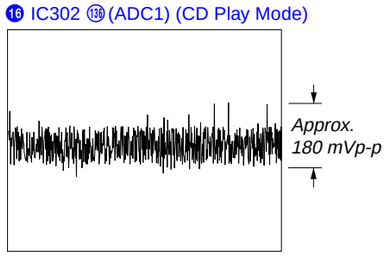
⓯ IC302 ⑬⑤ (ADC0) (CD Play Mode)



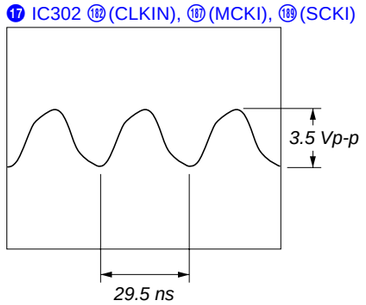
⓰ IC302 ⑬⑥ (ADC1) (DVD Play Mode)



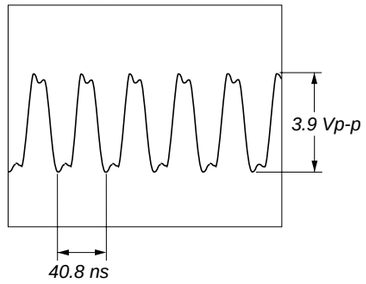
⓰ IC302 ⑬⑥ (ADC1) (CD Play Mode)



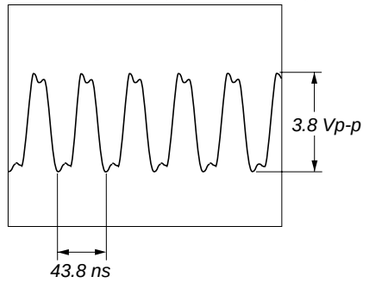
⓱ IC302 ⑱② (CLKIN), ⑱① (MCKI), ⑱⑧ (SCKI)



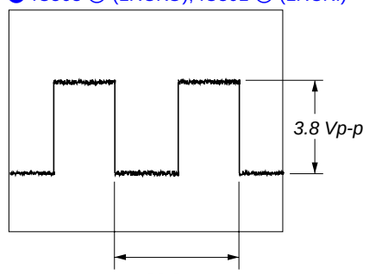
⓲ IC503 ⑫ (ACLK) (DVD Play Mode)



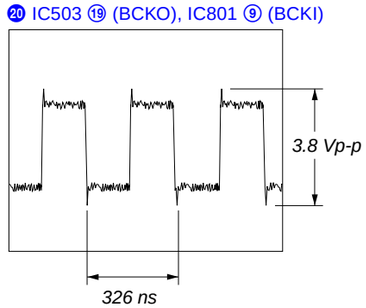
⓲ IC503 ⑫ (ACLK) (CD Play Mode)



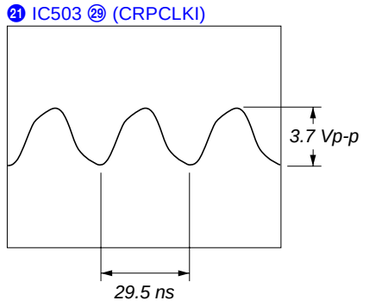
⓳ IC503 ⑱ (LRCKO), IC801 ⑤ (LRCKI)



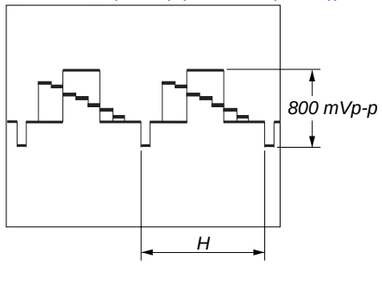
⓴ IC503 ⑲ (BCKO), IC801 ⑨ (BCKI)



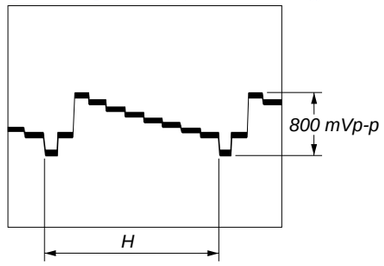
㉑ IC503 ㉙ (CRPCLKI)



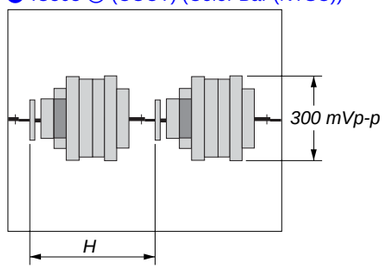
㉒ IC503 ⑭ (YOUT) (Color Bar (NTSC))



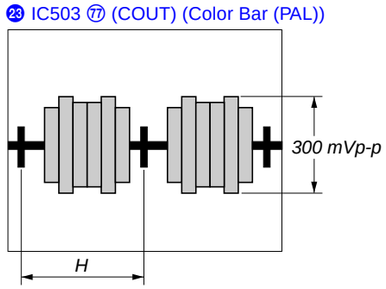
㉒ IC503 ⑭ (YOUT) (Color Bar (PAL))



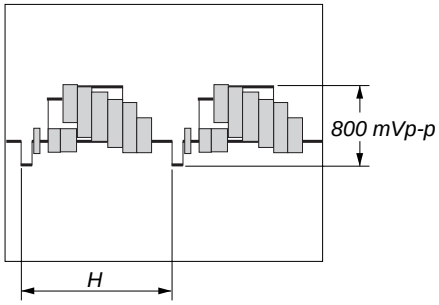
㉓ IC503 ⑰ (COUT) (Color Bar (NTSC))



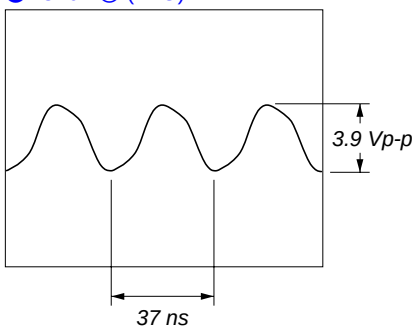
㉓ IC503 ⑰ (COUT) (Color Bar (PAL))



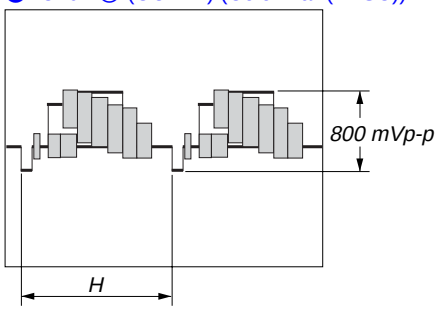
㉔ IC503 ㊽ (COMPOUT)
(Color Bar (NTSC))



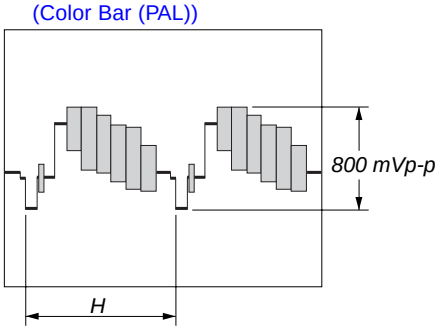
㉘ IC102 ⑧ (XTO)



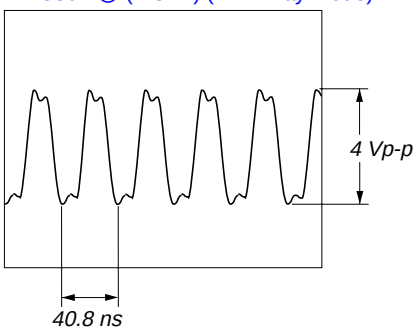
㉛ IC701 ⑬ (OUTB1) (Color Bar (NTSC))



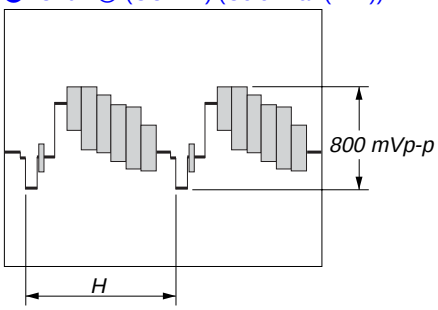
㉔ IC503 ㊽ (COMPOUT)
(Color Bar (PAL))



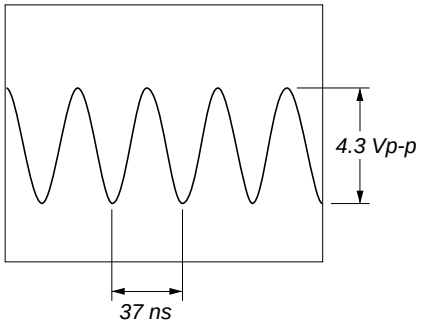
㉙ IC102 ⑨ (512-2OUT), ⑩ (512-1OUT) ,
IC801 ③ (MCLK) (DVD Play Mode)



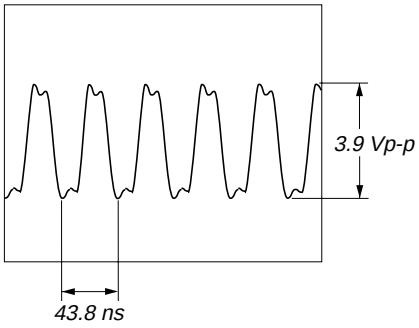
㉛ IC701 ⑬ (OUTB1) (Color Bar (PAL))



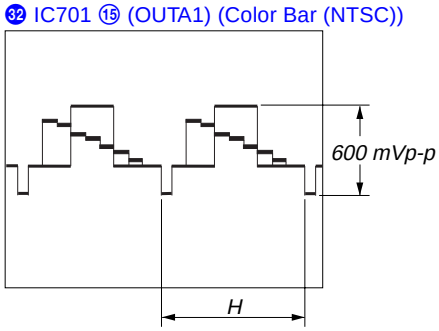
㉕ IC503 ⑱⓪ (CLKI), ⑱② (SCLKIN)



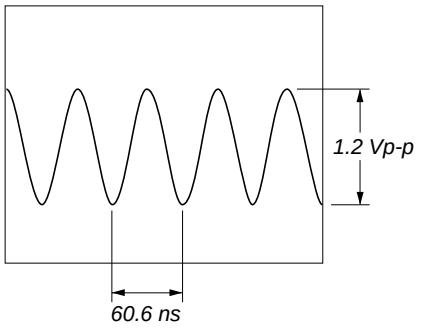
㉙ IC102 ⑨ (512-2OUT), ⑩ (512-1OUT)
IC801 ③ (MCLK) (CD Play Mode)



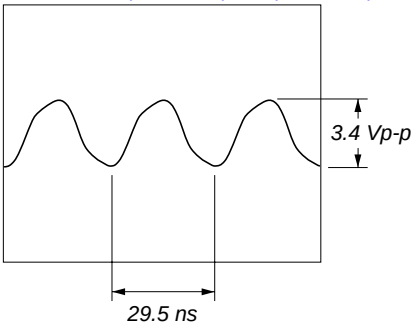
㉜ IC701 ⑮ (OUTA1) (Color Bar (NTSC))



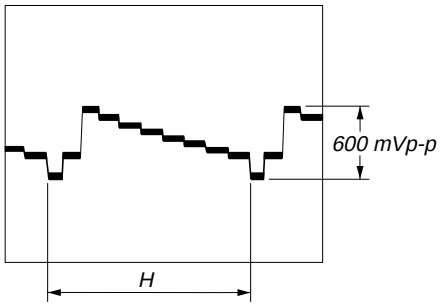
㉖ IC103 ㊺④ (X0)



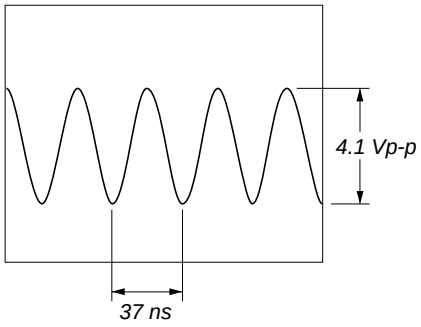
㉚ IC102 ⑬ (33-2OUT), ⑮ (33-1OUT)



㉜ IC701 ⑮ (OUTA1) (Color Bar (PAL))



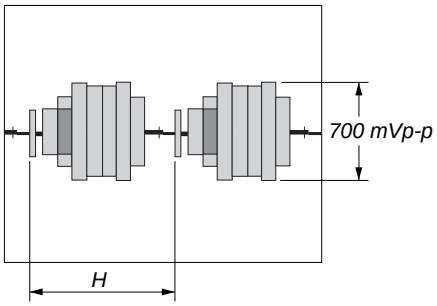
㉗ IC102 ③ (27-1OUT)



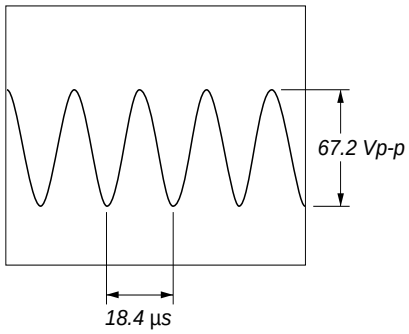
– TC Board –

– MAIN Board –

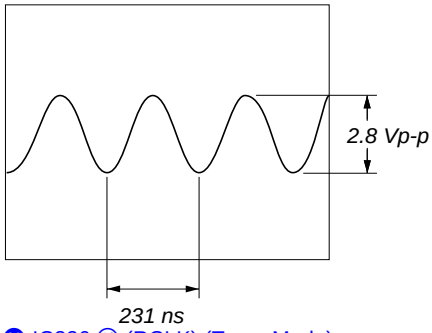
33 IC701 ⑩ (OUTC1) (Color Bar (NTSC))



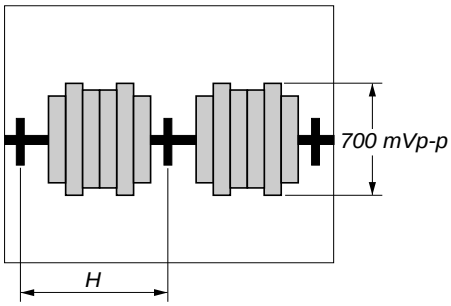
51 T401 (REC Mode)



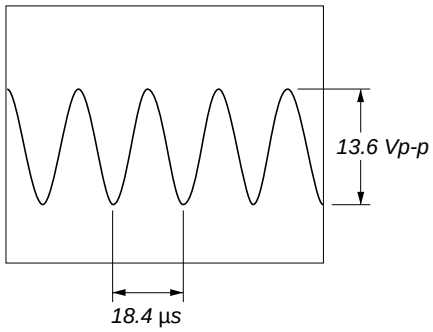
61 IC326 ⑬ (X1) (Tuner Mode)
(AEP, UK models)



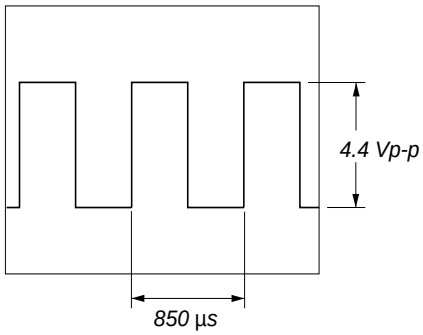
33 IC701 ⑩ (OUTC1) (Color Bar (PAL))



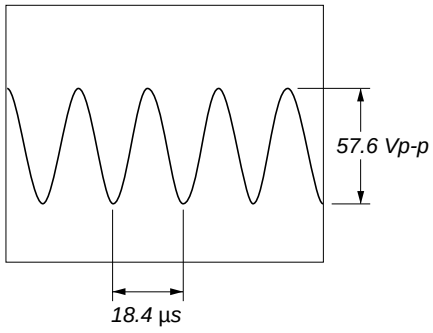
52 Q401 (Collector) (REC Mode)



62 IC326 ⑯ (RCLK) (Tuner Mode)
(AEP, UK models)



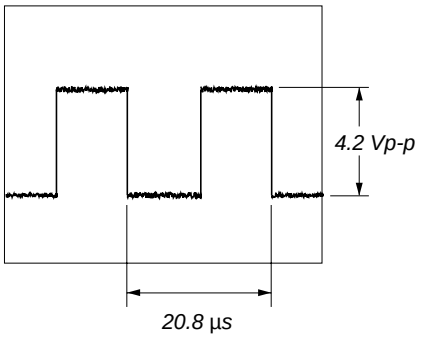
53 T101, 201 (REC Mode)



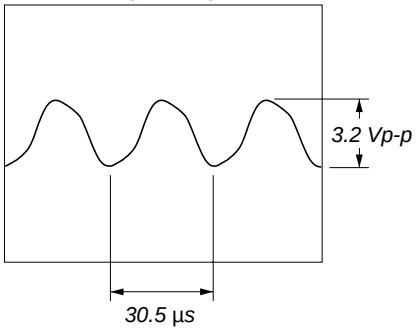
–DAC Board –

– CONTROL Board –

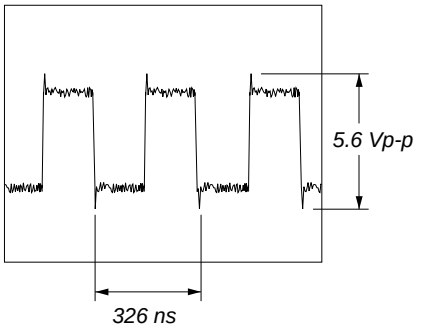
41 IC302 ⑧ (IIS-IN-BCK)



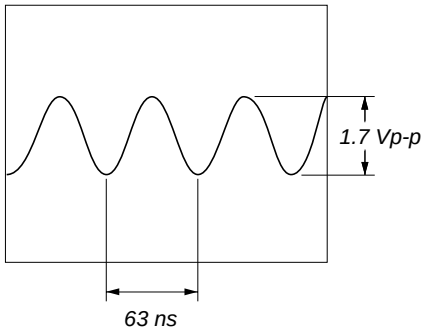
71 IC306 ⑪ (XCOUT)



42 IC302 ⑨ (IIS-IN-WS)

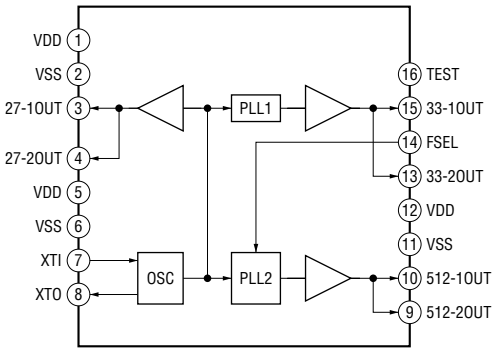


72 IC306 ⑬ (XOUT)

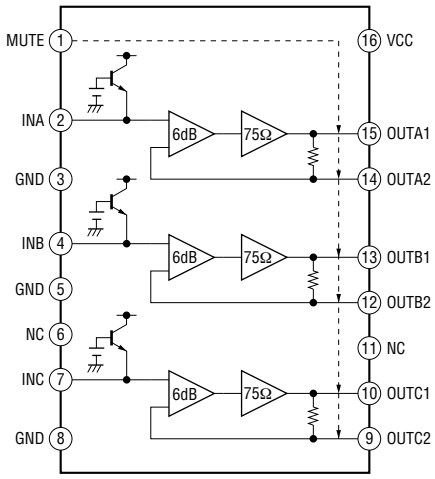


• **IC Block Diagrams**
– DVD Board –

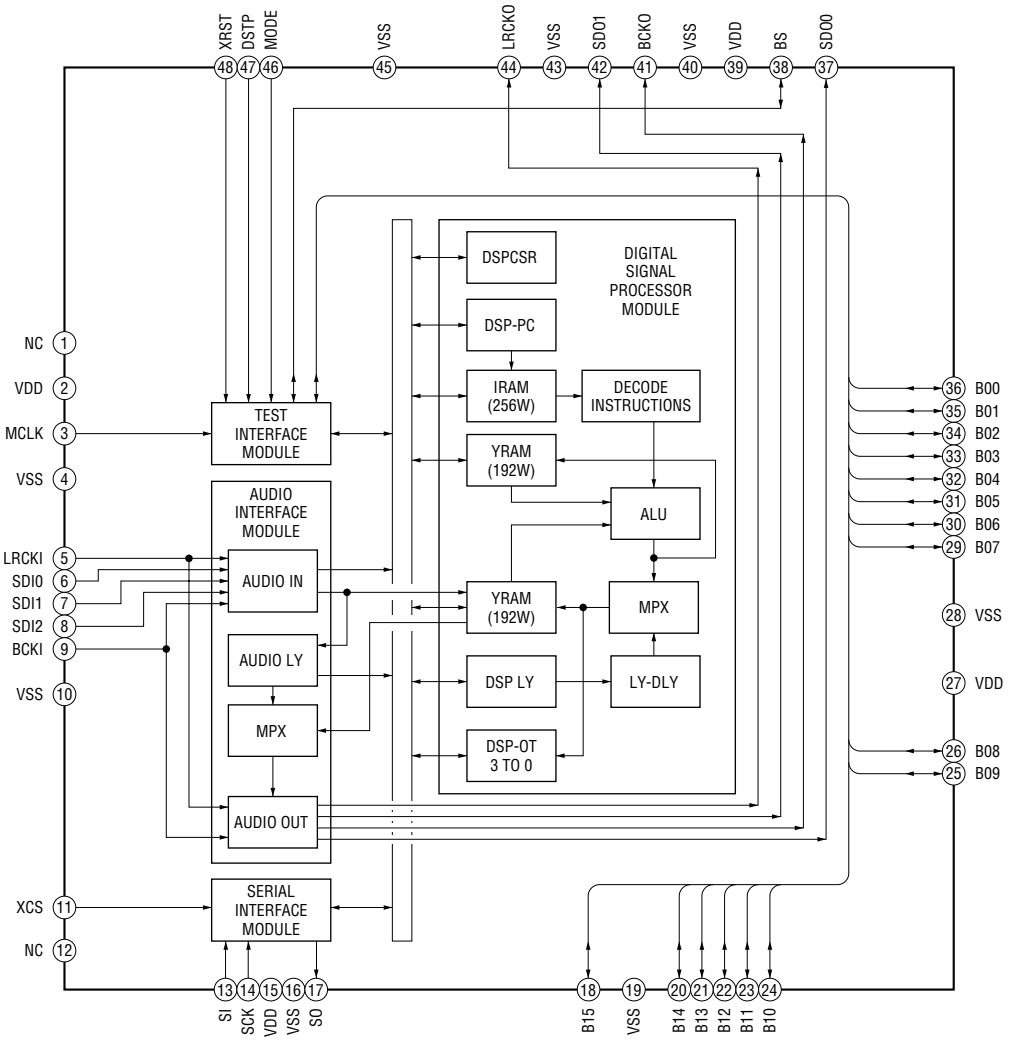
IC102 IMIC6001BTD



IC701 BA7666FS-E2

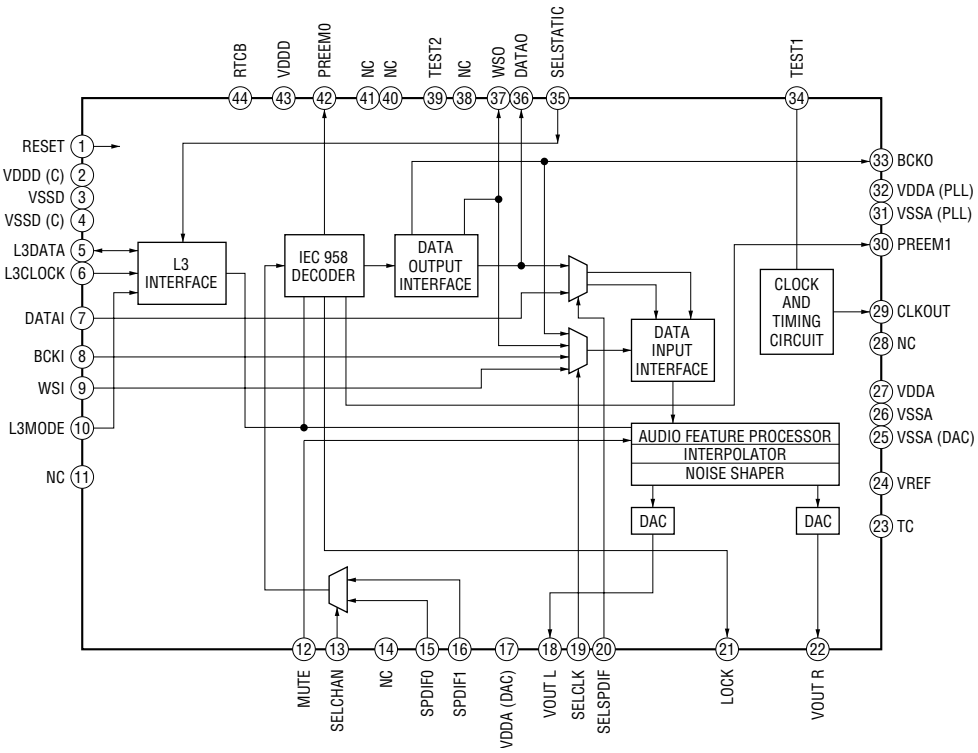


IC801 CXD9626Q



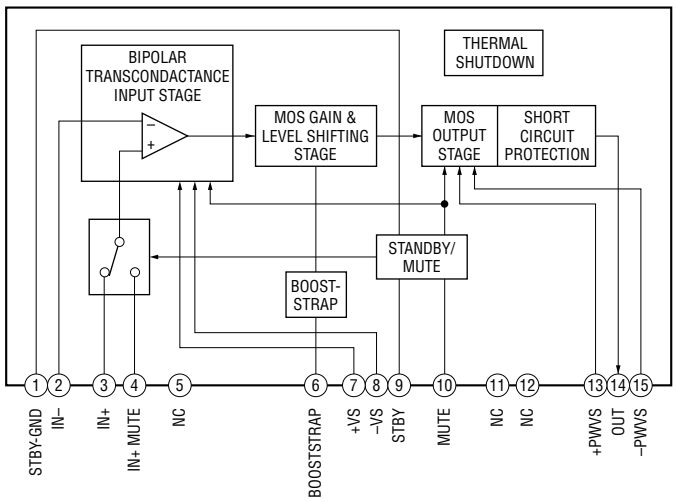
– DAC Board –

IC302 μDA1350AH

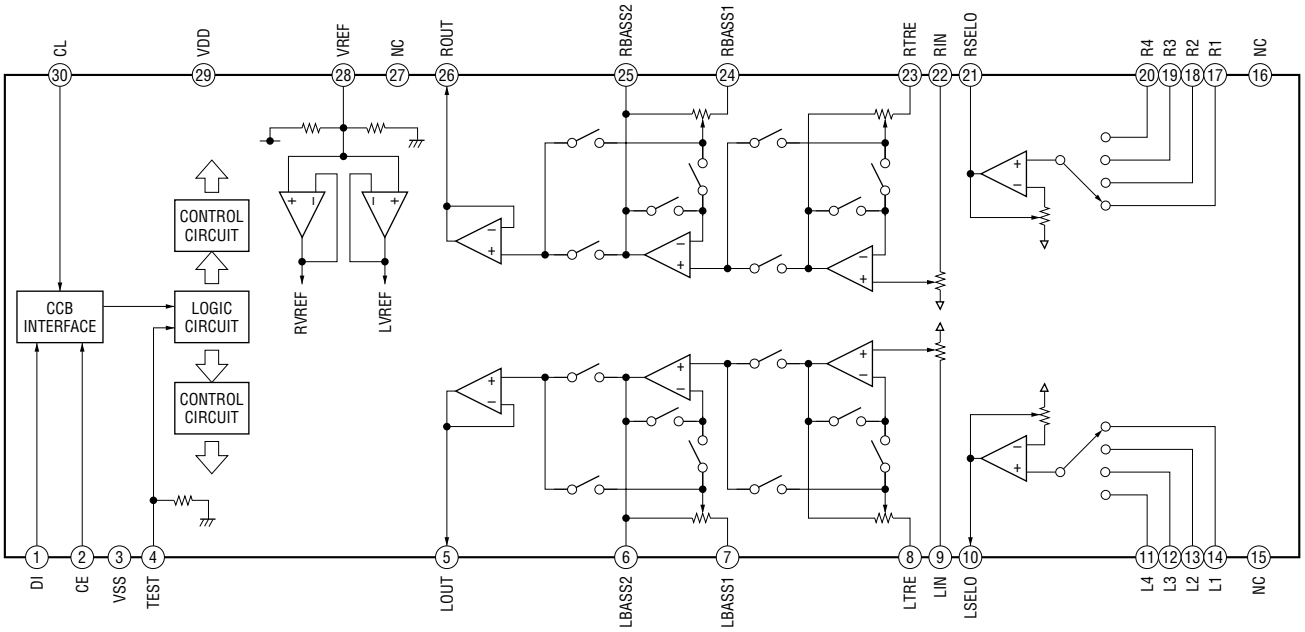


– MAIN Board –

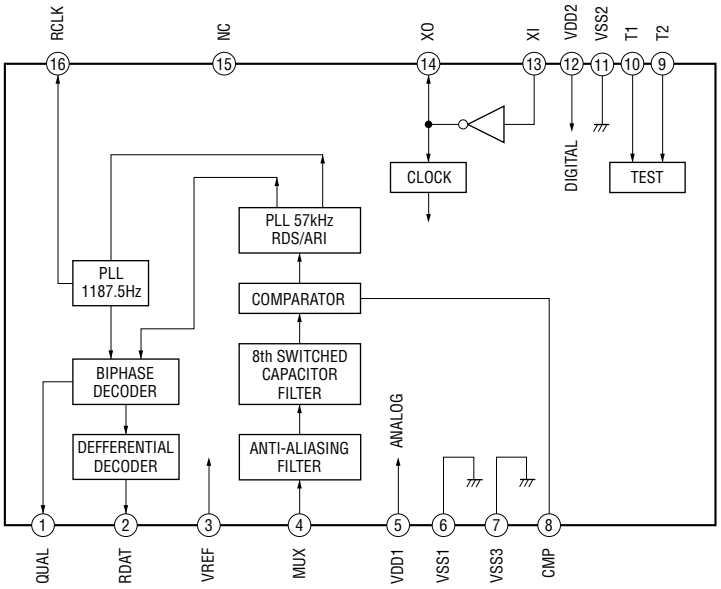
IC101, 201 TDA7296



IC323 LC75342



IC326 BU1924F-E2 (AEP, UK models)



6-54. IC PIN FUNCTION DESCRIPTION

• RF-240 BOARD IC001 SP3728AC (DVD/CD RF AMP, FOCUS/TRACKING ERROR AMP)

Pin No.	Pin Name	I/O	Description
1, 2	RFIP, RFIN	I	RF signal input
3	CP	—	Tracking LPF terminal
4	WIN	I	Wobble detection signal input terminal Not used
5	WPP	O	Wobble push-pull signal output terminal Not used
6	CN	—	Tracking LPF terminal
7 to 10	A2 to D2	I	Photo detector interface input (AC coupled input for the DPD and wobble)
11 to 14	D to A	I	Photo detector interface input (main)
15 to 18	E to H	I	Photo detector interface input (sub)
19	VC	O	Reference voltage (+2.5V) output terminal
20	VPB	—	Power supply terminal (+5V) (servo block)
21	DVDPD	I	DVD APC signal input
22	CDPD	I	CD APC signal input
23	VNB	—	Ground terminal (servo block)
24	LDSELO	O	APC LD select signal output
25	DVDLD	O	DVD APC signal output
26	CDLD	O	CD APC signal output
27	$\overline{\text{LDON}}$	I	APC LD output control signal input terminal
28	MEVO	O	Envelope signal output terminal for mirror
29	MIN	I	RF signal input terminal for mirror
30	MP	—	Mirror top hold terminal
31	MB	—	Mirror bottom hold terminal
32	MLPF	—	Mirror LPF terminal
33	MIRR	O	Mirror detect signal output to the servo DSP
34	BYP2	—	Servo AGC gain control terminal
35	PII	I	Pull-in signal input
36	PI	O	Pull-in signal output
37	TZC	O	Tracking zero crossing signal output to the servo DSP
38	DFT	O	Defect signal output to the servo DSP
39	VCI	I	Reference voltage input terminal
40	TZIN	I	Tracking zero crossing signal input
41	TE	O	Tracking error signal output to the servo DSP
42	FE	O	Focusing error signal output to the servo DSP
43	TPH	—	PI top hold terminal
44	MON	O	Monitor signal output to the servo DSP
45	SRD	O	Serial data output to the servo DSP
46	SWD	I	Serial data input from the servo DSP
47	SCLK	I	Serial clock signal input from the servo DSP
48	SDEN	I	Serial data enable signal input from the servo DSP
49	V33	—	Power supply terminal (+3.3V) (CMOS output buffers)
50	RX	I	Reference resistor input terminal
51	TPA	—	RF top hold terminal
52	MEV	—	RF bottom envelope terminal
53	VNA	—	Ground terminal (RF block and serial port)
54, 55	FNN, FNP	O	Differential filter normal signal output
56, 57	DIP, DIN	I	Analog signal input terminal for RF single buffer

Pin No.	Pin Name	I/O	Description
58	BYP	—	RF AGC gain control terminal
59	SIGO	O	Single-ended RF signal output to the ARP
60	VPA	—	Power supply terminal (+5V) (RF block and serial port)
61, 62	AIP, AIN	I	AGC amp signal input
63, 64	ATON, ATOP	O	Differential attenuator signal output

• **DVD BOARD IC103 MB91307APFV-G-BND-E1 (DVD SYSTEM CONTROLLER)**

Pin No.	Pin Name	I/O	Description
1 to 5	HA17 to HA21	O	Address signal output
6	HA22	—	Not used
7	WP	O	Write control signal output to the EEPROM
8	TRM/XKRCS	—	Not used
9	AVCC	—	Power supply terminal (+3.3V) (for A/D converter)
10	AVRH	—	Reference voltage input (+3.3V) terminal (for A/D converter)
11	AVSS	—	Ground terminal (for A/D converter)
12	AN0	I	Mode 0 set input terminal
13	AN1	I	Mode 1 set input terminal
14	AN2	I	Mode 2 set input terminal
15	AN3	I	Mode 3 set input terminal
16	INT0	I	Interrupt request signal input from the AV decoder
17	INT1	I	Interrupt request signal input from the ARP
18	INT2	I	Interrupt request signal input from the servo DSP
19	INT3	I	Interrupt request signal input terminal Not used
20	INT4	I	Interrupt request signal input from the system controller
21 to 23	INT5 to INT7	I	Interrupt request signal input terminal Not used
24	VCC	—	Power supply terminal (+3.3V)
25	SI0	I	Serial data input from the system controller
26	SO0	O	Serial data output to the system controller
27	SC0	O	Serial clock signal output to the system controller
28	SI1	I	Serial data input from the audio DSP
29	SO1	O	Serial data output to the audio DSP
30	SC1	O	Serial clock signal output to the audio DSP
31	SI2	I	Serial data input terminal (for test)
32	SO2	O	Serial data output terminal (for test)
33	DSENS	—	Not used
34	VSS	—	Ground terminal
35	XRST	O	System reset signal output “L”: reset
36	XARPRST	O	Reset signal output to the ARP “L”: reset
37	RGBSEL/MICMUTE	—	Not used
38	SDA	I/O	Two-way data bus with EEPROM
39	SCL	O	Serial clock signal output to the EEPROM
40	TRM+/XKRRST	—	Not used
41	EUROV/Y/CLAPSW1	—	Not used
42	DISCEXT/CLPSW0	—	Not used
43	MD0	I	Mode select 0 signal input terminal
44	MD1	I	Mode select 1 signal input terminal
45	MD2	I	Mode select 2 signal input terminal
46	DREQ0	I	Request 0 signal input from the AV decoder
47	DACK0	O	Acknowledge 0 signal output to the AV decoder
48	XDRVMUTE	O	Drive mute signal output to the motor/coil drive
49	DREQ1	I	Request 1 signal input from the AV decoder
50	DACK1	O	Acknowledge 1 signal output to the AV decoder

Pin No.	Pin Name	I/O	Description
51	XIFCS	O	Chip select signal output to the system controller
52	VSS	—	Ground terminal
53	X1	O	System clock output terminal (16.5 MHz)
54	X0	I	System clock input terminal (16.5 MHz)
55	VCC	—	Power supply terminal (+3.3V)
56	CKSW1	I	Disc tray open/close detect switch input
57	OCSW1	I	Disc tray open/close detect switch input
58	CS0X	O	Chip select signal output to the program ROM
59	CS1X	—	Not used
60	CS2X	O	Chip select signal output to the AV decoder
61	CS3X	O	Chip select signal output to the AV decoder
62	CS4X	O	Chip select signal output to the ARP
63	CS5X	O	Chip select signal output to the servo DSP
64	C	—	Capacitor connected terminal
65, 66	CS6X, CS7X	O	Chip select signal output terminal Not used
67	XWAIT	I	Wait signal input from the ARP and AV decoder
68	BGRNTX	—	Not used
69	BGR	—	Not used
70	XRD	O	Read enable signal output
71	XWRH	O	High byte write enable signal output
72	XWRL	—	Not used
73	NMIX	—	Not used
74	HSTX	—	Not used
75	VSS	—	Ground terminal
76	XFRRST	I	Reset signal input from the system controller “L”: reset
77	CPUCK	O	CPU clock signal output terminal Not used
78	OCSW2	—	Not used
79	XDACX	—	Not used
80	VESCS/X39CS	O	Chip select signal output to the audio DSP
81	48/44.1K	O	Sampling frequency selection signal output terminal “L”: 48 kHz, “H”: 44.1 kHz
82	WIDE	O	Wide signal output terminal Not used
83	MAMUTE	I	System OK signal input from the system controller
84	XLDON	O	LD control signal output ton the RF amp
85 to 100	HD0 to HD15	I/O	Two-way data bus
101	VSS	—	Ground terminal
102 to 109	HA0 to HA7	O	Address signal output
110	VCC	—	Power supply terminal (+3.3V)
111 to 118	HA8 to HA15	O	Address signal output
119	VSS	—	Ground terminal
120	HA16	O	Address signal output

• **DVD BOARD IC302 CXD9635R (SERVO DIGITAL SIGNAL PROCESSOR, ARP)**

Pin No.	Pin Name	I/O	Description
1	VSS	—	Ground terminal (for digital system)
2 to 9	D0 to D7	I/O	Two-way data bus
10	VDD 3.3V	—	Power supply terminal (+3.3V) (for digital system)
11 to 15	A0 to A4	I	Address signal input from the DVD system controller
16	VSS	—	Ground terminal (for digital system)
17 to 19	A5 to A7	I	Address signal input from the DVD system controller
20	VDD 1.8V	—	Power supply terminal (+1.8V) (for digital system)
21	XINT	O	Interrupt request signal output to the DVD system controller
22	HINT	O	Interrupt request signal output to the DVD system controller
23	XCS	I	Chip select signal input from the DVD system controller
24	HCS	I	Chip select signal input from the DVD system controller
25	XWAT	O	Wait signal output to the DVD system controller
26	VSS	—	Ground terminal (for digital system)
27 to 36	MA0 to MA9	O	Address signal output to the D-RAM
37	VDD 3.3V	—	Power supply terminal (+3.3V) (for digital system)
38	XMWR	O	Write enable signal output to the D-RAM
39	XCAS	O	CAS signal output to the D-RAM
40	VSS	—	Ground terminal (for digital system)
41	XRAS	O	RAS signal output to the D-RAM
42	XOE	O	Output enable signal output to the D-RAM
43	VDD1 1.8V	—	Power supply terminal (+1.8V) (for digital system)
44 to 51	MD0 to MD7	I/O	Two-way data bus with the D-RAM
52	VSS	—	Ground terminal (for digital system)
53 to 60	MD8 to MD15	I/O	Two-way data bus with the D-RAM
61	VDD 3.3V	—	Power supply terminal (+3.3V) (for digital system)
62	DATA	O	CD data output to the AV decoder
63	BCLK	O	CD bit clock signal output to the AV decoder
64	VSS	—	Ground terminal (for digital system)
65	LRCK	O	CD LR clock signal output to the AV decoder
66	DOUT	O	Digital signal output to the AV decoder
67	VDD 1.8V	—	Power supply terminal (+1.8V) (for digital system)
68	SDCK	O	SD bus clock signal output to the AV decoder
69	XSHD	O	SD bus header signal output to the AV decoder
70	XSRQ	I	SD bus request signal input from the AV decoder
71	XSAK	O	SD bus acknowledge signal output to the AV decoder
72	SDEF	O	SD bus error flag signal output to the AV decoder
73 to 81	SD0 to SD7	O	SD bus data output to the AV decoder
82	VDD 3.3V	—	Power supply terminal (+3.3V) (for digital system)
83 to 88	MNT0 to MNT5	I/O	Monitor signal input/output terminal Not used
89, 90	MNT6, MNT7	I/O	Monitor signal input/output terminal Not used
91	ESTB	O	Error strobe signal output terminal Not used
92	VDD 1.8V	—	Power supply terminal (+1.8V) (for digital system)
93	RFD	I/O	RF digital data input/output terminal Not used
94	VSS	—	Ground terminal (for digital system)

Pin No.	Pin Name	I/O	Description
95	PLCKO	O	Not used
96 to 103	ADO0 to ADO7	O	Not used
104	VSS	—	Ground terminal (for digital system)
105	VSSA4	—	Ground terminal (for analog system)
106	VCO	I	VCO control signal input
107, 108	R1, R2	I	VCO outside resistance signal input
109	VDDA4 3.3V	—	Power supply terminal (+3.3V) (for analog system)
110	VSSA3	—	Ground terminal (for analog system)
111	INP	I	OP amp positive input terminal
112	INM	I	OP amp negative input terminal
113 to 115	FR3 to FR1	I	Feedback resistance signal
116	Y	O	OP amp output terminal
117	VDDA3 3.3V	—	Power supply terminal (+3.3V) (for analog system)
118	VREF	I	Reference voltage input terminal (for D/A converter)
119	BIAS	I	Bias input terminal (for D/A converter)
120	VDDA2 3.3V	—	Power supply terminal (+3.3V) (for analog system)
121	VSSA2	—	Ground terminal (for analog system)
122	AOUT	O	D/A converter output terminal (for D/A converter)
123	IREF	I	Reference current input terminal (for D/A converter)
124	VSSD2	—	Ground terminal (for D/A converter)
125	VDDD2 3.3V	—	Power supply terminal (+3.3V) (for D/A converter)
126	VRT	I	A/D converter reference input terminal
127	VDDA1 3.3V	—	Power supply terminal (+3.3V) (for analog system)
128	RFIN2	I	RF signal input from the RF amp
129	NMIX	—	RF signal input terminal Not used
130	VSSA1	—	Ground terminal (for analog system)
131	RFIN1	I	RF signal input from the RF amp
132	VRB	I	A/D converter reference input terminal
133	VSSD1	—	Ground terminal (for A/D converter)
134	VDDD1 3.3V	—	Power supply terminal (+3.3V) (for A/D converter)
135	ADC0	I	Tracking error signal input from the RF amp
136	ADC1	I	Focusing error signal input from the RF amp
137	ADC2	I	Pull-in signal input from the RF amp
138	VDDA0 3.3V	—	Power supply terminal (+3.3V) (for analog system)
139	ADC3	I	Tracking coil drive signal input from the coil drive
140	ADC4	I	Spindle motor drive signal input from the motor drive
141	VSSA0	—	Ground terminal (for analog system)
142, 143	ADC5, ADC6	I	A/D converter input terminal
144	ADC7	I	Monitor signal input from the RF amp
145	VDDD0 3.3V	—	Power supply terminal (+3.3V) (for A/D converter)
146	VSSD0	—	Ground terminal (for A/D converter)
147	VRBA	I	A/D converter reference input terminal
148	VSSA0	—	Ground terminal (for analog system)
149	TESTAA	O	ASW output terminal Not used
150	VDDA0 3.3V	—	Power supply terminal (+3.3V) (for analog system)

Pin No.	Pin Name	I/O	Description
151	VRTA	I	A/D converter reference input terminal
152	VSS	—	Ground terminal (for digital system)
153 to 155	TESTK0 to TESTK2	I	Test signal input terminal (fixed at “L”)
156	XDSPRST	I	DSP reset signal input from the DVD system controller “L”: reset
157	XARPRST	I	ARP reset signal input from the DVD system controller “L”: reset
158	VSS	—	Ground terminal (for digital system)
159	MDS0	O	Spindle motor drive signal output to the motor drive
160	MON	O	Motor ON/OFF signal output terminal Not used
161	MDP0	O	Spindle motor drive signal output to the motor drive
162	DFCT	O	Defect detection signal output
163	JITPWM	O	Jitter PWM signal output terminal Not used
164	LOCK	O	EFM lock detection signal output terminal Not used
165	VDD1 1.8V	—	Power supply terminal (+1.8V) (for digital system)
166	GIO0/INT2	I	Inlimit sensor input terminal
167	GIO1/INT3	O	Spindle motor drive control signal output to the motor drive
168	GIO2/INT4	I	TSD-M signal input from the motor/coil drive
169	GIO3/INT5	—	Not used
170	VDD 3.3V	—	Power supply terminal (+3.3V) (for digital system)
171	GIO4/PGREF	—	Not used
172	GIO5/PGIN	I	Monitor signal input from the RF amp
173	GIO6/SDI	I	Serial data input from the RF amp
174	GIO7/SDO	O	Serial data output to the RF amp
175	GIO8/SCK	O	Serial clock signal output to the RF amp
176	GIO9/FGREF	O	Loading motor drive signal output to the motor drive
177	GIO10/FGIN	O	Loading motor drive signal output to the motor drive
178	GIO11/TMC2	—	Not used
179	GIO12	—	Not used
180	GIO13	O	Serial data enable signal output to the RF amp
181	VSS	—	Ground terminal (for digital system)
182	CLKIN	I	Clock signal input from the clock generator
183	VSSA5	—	Ground terminal (for analog system)
184	VDDA5 1.8V	—	Power supply terminal (+1.8V) (for analog system)
185	DFCTI	I	Defect signal input from the RF amp
186	VSS	—	Ground terminal (for digital system)
187	MCKI	I	Clock signal input from the clock generator
188	VDD 1.8V	—	Power supply terminal (+1.8V) (for digital system)
189	SCKI	I	Clock signal input from the clock generator
190	VSS	—	Ground terminal (for digital system)
191	TRST	I	Reset signal input terminal (for JTAG boundary scan)
192	TMS	I	MS signal input terminal (for JTAG boundary scan)
193	TDI	I	Serial data input terminal (for JTAG boundary scan)
194	TCK	I	Clock signal input terminal (for JTAG boundary scan)
195	TDO	O	Serial data output terminal (for JTAG boundary scan)
196	TZC	I	Tracking zero crossing signal input from the RF amp
197	MIRR	I	Mirror detect signal input terminal from the RF amp

Pin No.	Pin Name	I/O	Description
198, 199	PWM0, PWM1	O	Sled motor drive signal output to the motor drive
200	PWM2	O	Loading motor drive control signal output to the motor drive
201	VDD 3.3V	—	Power supply terminal (+3.3V) (for digital system)
202, 203	PDM0, PDM1	O	Tracking coil drive signal output to the coil drive
204, 205	PDM2, PDM3	O	Focusing coil drive signal output to the coil drive
206	VSS	—	Ground terminal (for digital system)
207	XWR	I	Write enable signal input from the DVD system controller
208	XRD	I	Read enable signal input from the DVD system controller

• **CONTROL BOARD IC306 M30620MCN-A11FP (SYSTEM CONTROLLER)**

Pin No.	Pin Name	I/O	Description
1	DAC RESET	O	Reset signal output to the D/A converter "L": reset
2	RDS DATA	I	Serial data input from the RDS decoder (at tuner function) (RDS decoder is used for the AEP and UK models)
3	LCD RS	O	Reset signal output to the liquid crystal display "L": reset
4	SIRCS	I	Sircs remote control signal input
5	LCD DATA	O	Serial data output to the liquid crystal display
6	LCD STB	O	Strobe signal output to the liquid crystal display
7	LCD SCK	O	Serial data transfer clock signal output to the liquid crystal display
8	BYTE	—	Not used
9	CNVSS	—	Not used
10	XCIN	I	Sub system clock input terminal (32.768 kHz)
11	XCOUT	O	Sub system clock output terminal (32.768 kHz)
12	$\overline{\text{RESET}}$	I	System reset signal input "L": reset For several hundreds msec. after the power supply rises, "L": is input, then it changes to "H"
13	XOUT	O	Main system clock output terminal (16 MHz)
14	VSS	—	Ground terminal
15	XIN	I	Main system clock input terminal (16 MHz)
16	VCC	—	Power supply terminal (+4V)
17	NMI	I	Not used (pull up)
18	RDS-INT	I	Serial data transfer clock signal input from the RDS decoder (RDS decoder is used for the AEP and UK models)
19	SYSCS	I	Chip select signal input from the DVD system controller
20	AC-CUT	I	AC cut signal input "L": AC cut on
21	ST MUTE	O	Muting on/off control signal output terminal Not used
22	ST CE	O	Chip enable signal output to the tuner unit
23	ST DOUT	O	Serial data output to the tuner unit
24	PWM3	O	Power on/off control signal output terminal Not used
25	ST DIN	I	PLL serial data input from the tuner unit
26	PWM2	O	Power on/off control signal output terminal Not used
27	ST CLK	O	Serial data transfer clock signal output to the tuner unit (at tuner function)
28	PWM1	O	Power on/off control signal output terminal Not used
29	IIC-CLK	O	IIC data transfer clock signal output terminal Not used
30	IIC-DATA	O	IIC data output terminal Not used
31	TXD1	O	Serial data output terminal Not used
32	RXD1	I	Serial data input terminal Not used
33	SCLK	O	Video muting control signal output to the video buffer
34	PLL-LOCK DET	I	PLL lock detect signal input
35	DATA	O	Serial data output to the DVD system controller
36	XLT	I	Serial data input from the DVD system controller
37	CLK	I	Serial data transfer clock signal input from the DVD system controller
38	PLAY SW	I	Head position detect switch input terminal "L": forward direction, "H": reverse direction
39	LINE MUTE	O	Line muting on/off control signal output to the recording/playback equalizer amp "H": muting on
40	TUNER ON	O	Power supply on/off control signal output for the tuner section (+9.5V) "H": tuner power on

Pin No.	Pin Name	I/O	Description
41	$\overline{\text{REC MUTE}}$	O	Recording muting on/off control signal output to the recording/playback equalizer amp "L": muting on
42	STBY-LED	O	LED drive signal output of the standby indicator "H": LED on
43	REC/$\overline{\text{PB}}$	O	Recording/playback selection signal output to the tape section "L": playback mode, "H": recording mode
44	DA MUTE	O	Muting on/off control signal output terminal Not used
45	DSG-LED	O	LED drive signal output of the DSG (Dynamic Sound Generator) indicator "H": LED on
46	TC-LED	O	LED drive signal output of the TAPE indicator "H": LED on
47	CD-SYNC LED	O	LED drive signal output of the CD SYNCHRO indicator "H": LED on
48	CD-LED	O	LED drive signal output of the DVD indicator "H": LED on
49	TU-LED	O	LED drive signal output of the TUNER indicator "H": LED on
50	H/P DETECT	I	Headphone jack connection detection signal input terminal "L": no connected, "H": headphone connected
51	BACK LIGHT	O	Power on/off control signal output to the liquid crystal display and back light "H": power on
52	VILUME B	—	Not used
53	VILUME A	—	Not used
54	LD ON	O	Interrupt request signal output to the DVD system controller
55	1-4	—	Not used
56	SENS	O	System OK signal output to the DVD system controller
57	TUNED	I	Automatic limiter control signal input from the tuner unit
58	BTRG	O	Trigger plunger on/off control signal output "H": plunger on
59	CAPM CONT1	O	Capstan/reel motor on/off control signal output "H": motor on
60	XRST	O	Reset signal output to the DVD system controller "L": reset
61	CTRL1-2	—	Not used
62	VCC	—	Power supply terminal (+4V)
63	SOFT-TEST	O	Test terminal Not used
64	VSS	—	Ground terminal
65	SYSPWR	O	DVD system power supply on/off control signal output "L": power on
66	CD MUTE	O	Muting on/off control signal output terminal Not used
67	LOAD OUT	I	Loading out detect signal input terminal Not used
68	LOAD IN	I	Loading in detect signal input terminal Not used
69	OPEN	I	Disc tray open detect signal input terminal Not used
70	CLOSE	I	Disc tray close detect signal input terminal Not used
71	BASS A	—	Not used
72	BASS B	—	Not used
73	DISPLAY KEY	I	Key input terminal Not used
74	POWER KEY	I	Power key input terminal
75	PC POWER	—	Not used
76	TREBLE A	—	Not used
77	TREBLE B	—	Not used
78	MDM POWER	—	Not used
79	INPUT SEL	O	Data input select control signal output to the D/A converter
80	ALC	O	Automatic limiter control signal output to the recording/playback equalizer amplifier "L": limiter on
81	LINE MUTE	O	Audio line muting on/off control signal output "H": muting on
82	STBY RLY	O	Main system power supply on/off control signal output "H": power on
83	FAN CONT	O	Fan motor control signal output terminal Not used

Pin No.	Pin Name	I/O	Description
84	STK PWR	O	Power on/off control signal output to the power amp "L": power on
85	H/P MUTE	O	Muting on/off control signal output terminal Not used
86	AMP CE	O	Chip enable signal output to the electrical volume
87	VOL-SDA	O	Serial data output to the electrical volume
88	AMP CLK	O	Serial data transfer clock signal output to the electrical volume
89	STK MUTE	O	Muting on/off control signal output to the power amp "H": muting on
90	END SW	I	Tape end detect switch input terminal "H" input when the tape end detected
91	TC SW	I	Half detect (side A and B) switch and cassette in detect switch input terminal (A/D input)
92	MODEL IN	I	Destination setting terminal
93	SPEC IN	I	Destination setting terminal
94, 95	KEY1, KEY2	I	Key input terminal (A/D input)
96	AG	—	Not used
97	KEY3	I	Key input terminal (A/D input)
98	VREF	O	Reference voltage (+4V) input terminal (for A/D conversion)
99	AVCC	—	Power supply terminal (+4V)
100	DC DETECT	I	Protect on/off control signal input from the speaker protect circuit "L": protect on

SECTION 7
EXPLODED VIEWS

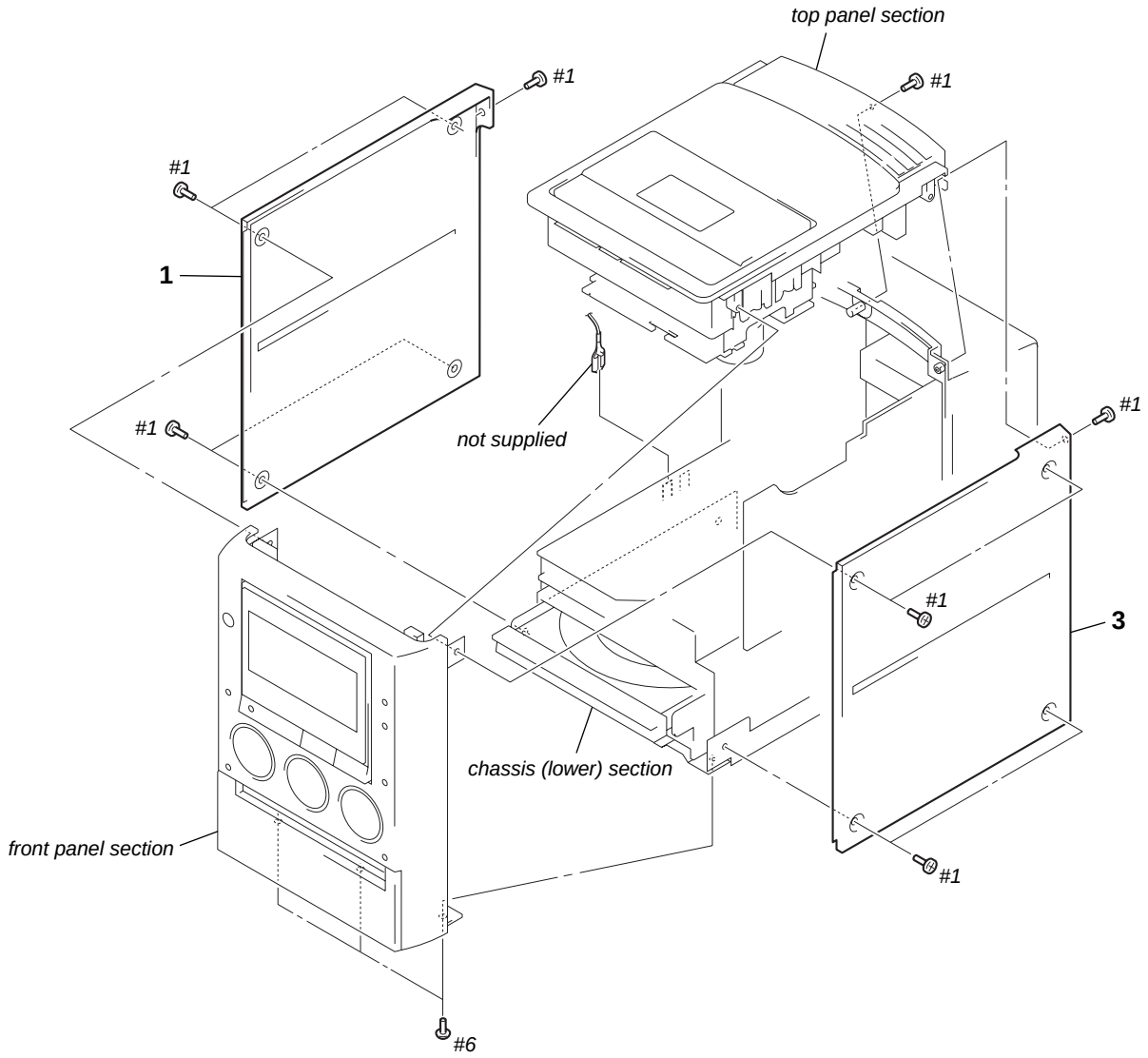
NOTE:
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts
  Example:
  KNOB, BALANCE (WHITE) . . . (RED)
  ↑ ↑
  Parts Color Cabinet's Color
- Abbreviation
  AUS : Australian model CND : Canadian model
  CH : Chinese model SP : Singapore model
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Accessories are given in the last of the electrical parts list.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiquens pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

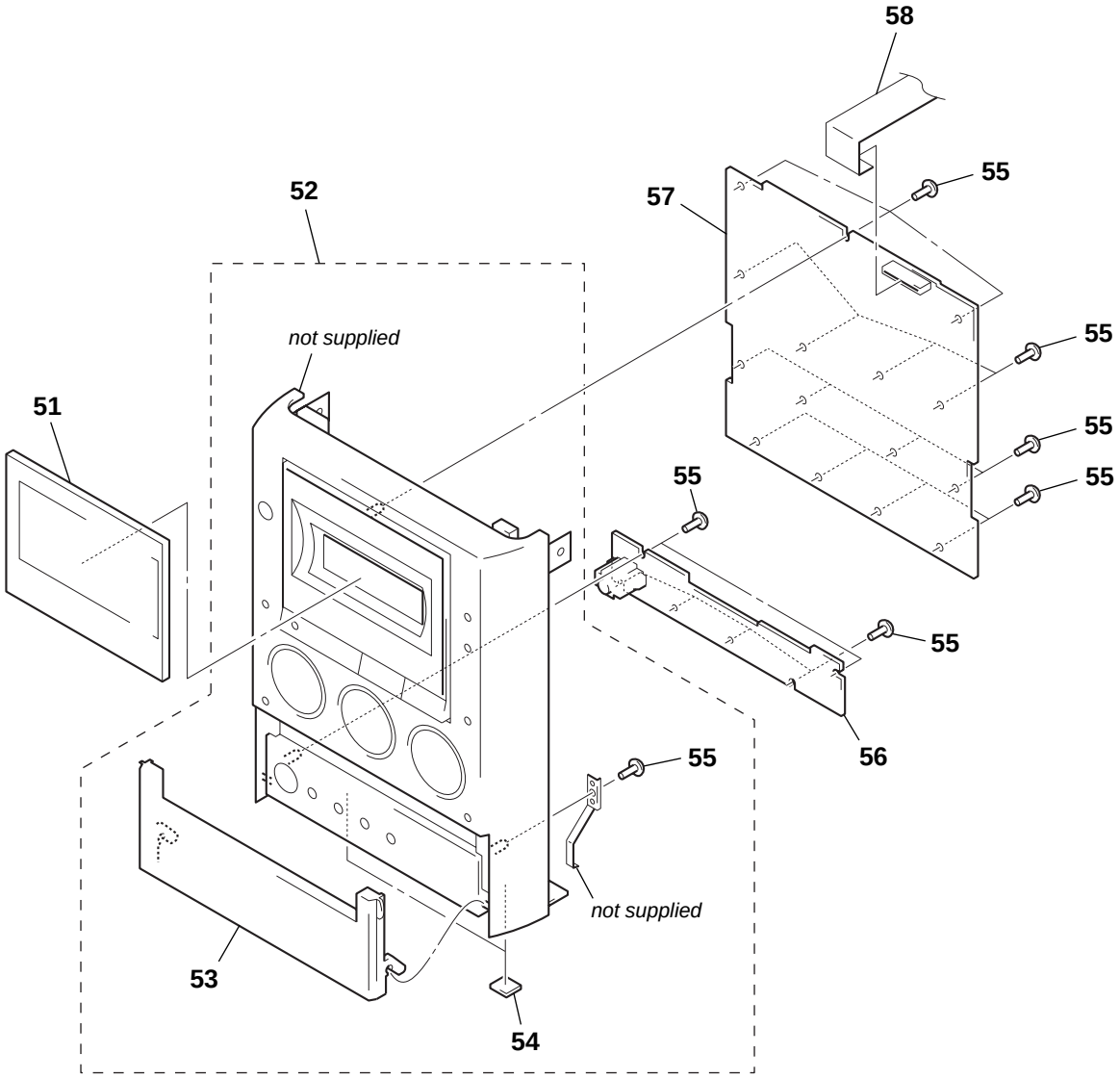
以阴影和 ⚠ 标志来识别的零部件，在安全方面具有关键性，因此只能以规定号码的零部件来更换。

7-1. PANEL (SIDE) SECTION



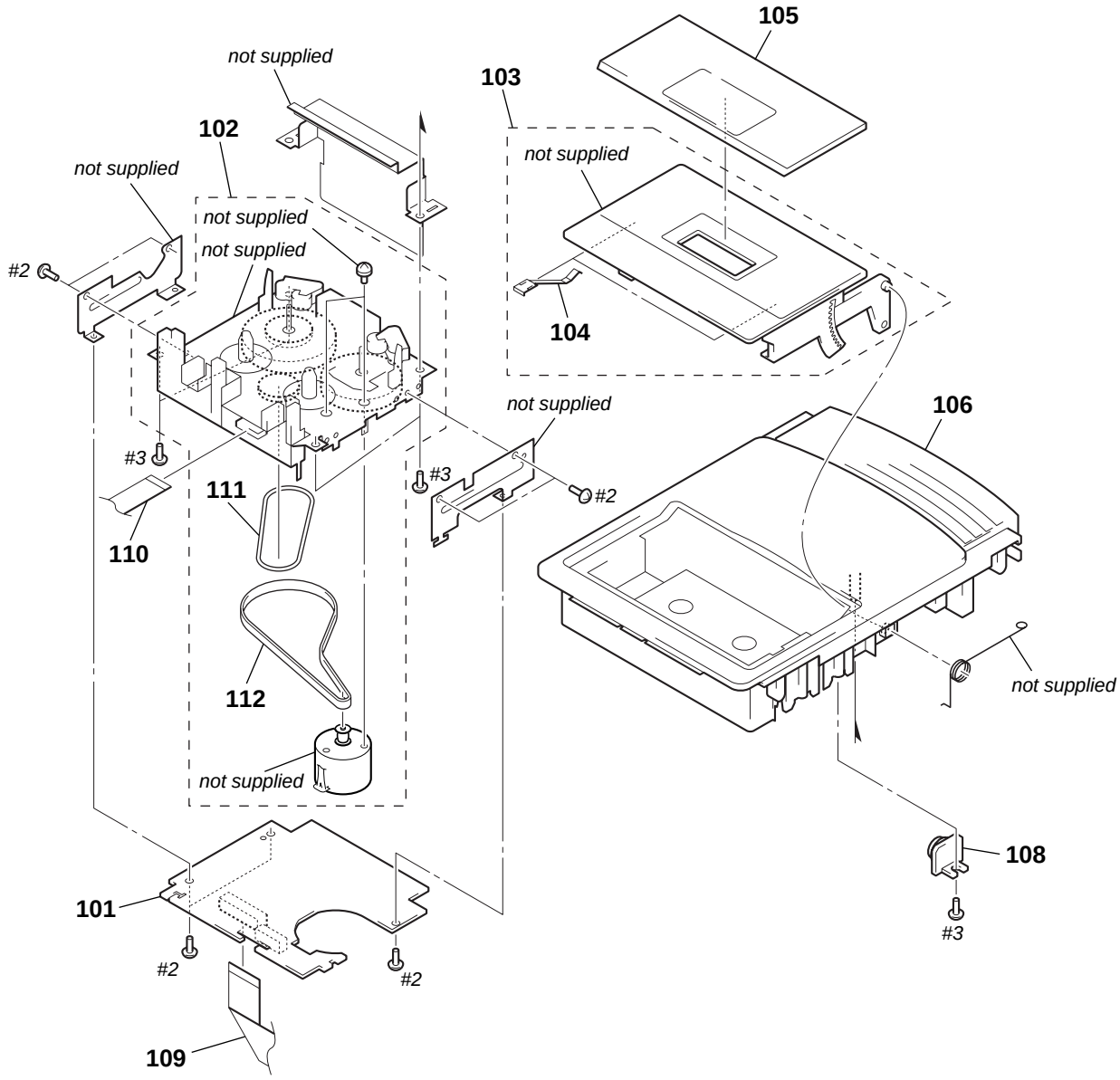
Ref. No.	Part No.	Description	Remark
1	4-238-706-01	PANEL (SIDE) (L) (AEP, UK, CH)	
1	4-238-706-11	PANEL (SIDE) (L) (SP, AUS)	
1	4-238-706-53	PANEL (SIDE) (L) (US, CND)	
3	4-238-707-01	PANEL (R), SIDE (AEP, UK, CH)	
3	4-238-707-11	PANEL (R), SIDE (SP, AUS)	
3	4-238-707-53	PANEL (R), SIDE (US, CND)	
#1	7-685-547-14	SCREW +BTP 3X10 TYPE2 N-S	
#6	7-685-546-14	SCREW +BTP 3X8 TYPE2 N-S	

7-2. FRONT PANEL SECTION



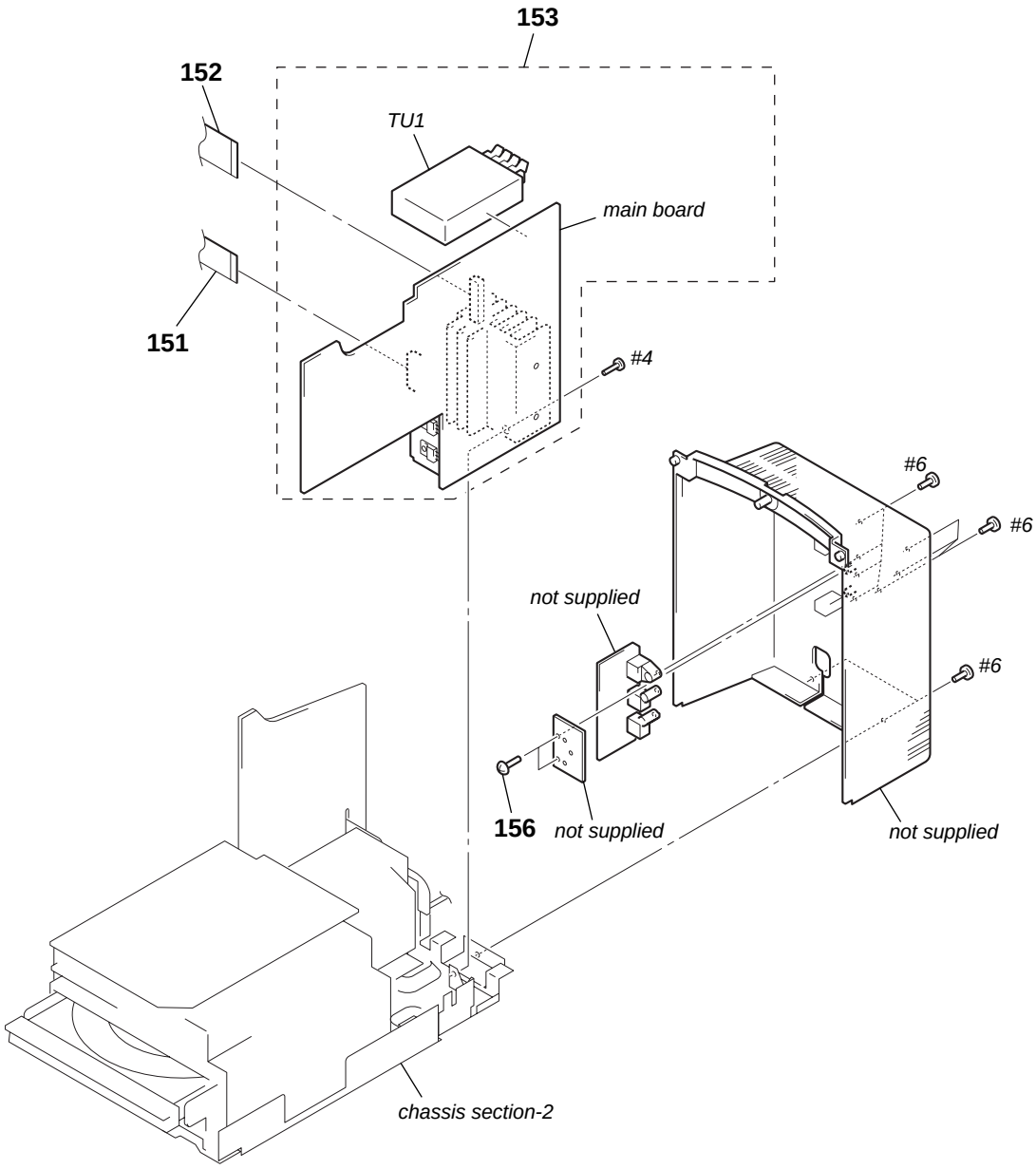
Ref. No.	Part No.	Description	Remark
51	4-239-816-01	WINDOW, LCD (AEP, UK)	
51	4-239-816-11	WINDOW, LCD (US, CND, CH)	
51	4-239-816-21	WINDOW, LCD (SP, AUS)	
52	X-4954-657-2	PANEL SUB ASSY (FRONT) (AEP, UK, CH)	
52	X-4954-658-4	PANEL SUB ASSY (FRONT) (US, CND)	
52	X-4954-822-2	PANEL SUB ASSY (FRONT) (SP, AUS)	
53	4-238-685-51	COVER (F) (US, CND, AEP, UK, CH)	
53	4-238-685-61	COVER (F) (SP, AUS)	
54	4-232-478-01	FOOT	
55	4-931-757-31	SCREW (DIA. 2.6X8) (IT3B), TAPPING	
56	1-685-428-12	JACK BOARD	
57	A-4729-457-A	SWITCH BOARD, COMPLETE (EXCEPT CH)	
57	A-4730-561-A	SWITCH BOARD, COMPLETE (CH)	
58	1-824-373-11	WIRE (FLAT TYPE) (FFC) (21 CORE)	

7-3. TOP PANEL SECTION



Ref. No.	Part No.	Description	Remark
101	A-4729-461-A	TC BOARD, COMPLETE	
102	1-796-353-21	DECK, MECHANICAL (TAPE)	
103	X-4954-501-1	HOLDER ASSY, CASSETTE (US, CND, AEP, UK, CH)	
103	X-4954-502-1	HOLDER ASSY, CASSETTE (SP, AUS)	
104	4-234-557-01	SPRING (TAPE)	
105	4-238-683-03	WINDOW (CASSETTE) (US, CND, AEP, UK, CH)	
105	4-238-683-11	WINDOW (CASSETTE) (SP, AUS)	
106	X-4954-499-1	PANEL SUB ASSY (TOP) (AEP, UK, CH)	
106	X-4954-500-1	PANEL SUB ASSY (TOP) (SP, AUS)	
106	X-4954-824-3	PANEL SUB ASSY (TOP) (US, CND)	
108	3-926-926-01	GEAR, DAMPER	
109	1-773-048-11	WIRE (FLAT TYPE) (17 CORE)	
110	1-824-335-11	WIRE (FLAT TYPE) (EEC) (8 CORE)	
111	4-241-659-01	BELT	
112	4-241-718-01	BELT (FLAT)	
#2	7-685-861-01	SCREW +BVTT 2.6X5 (S)	
#3	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	

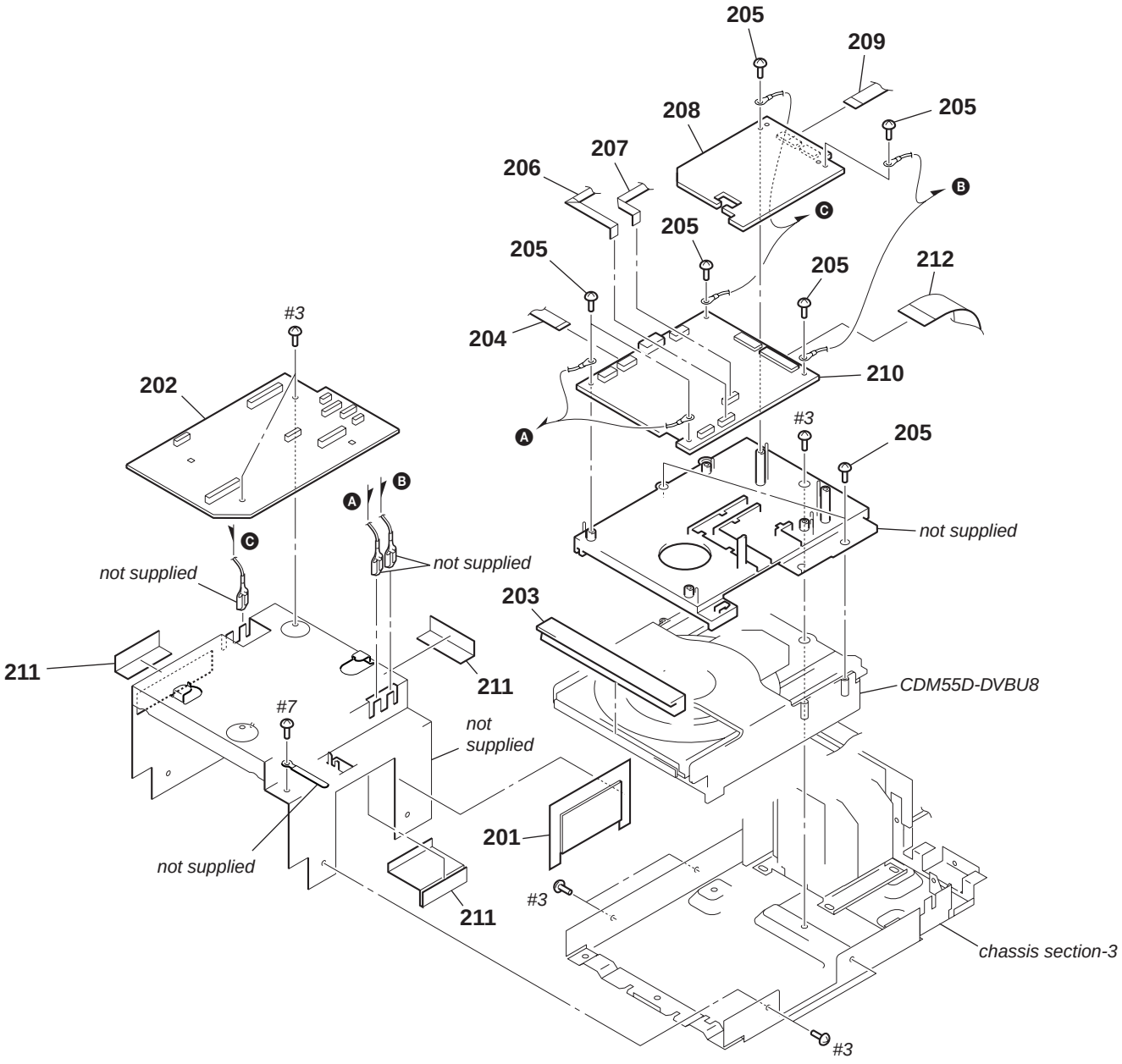
7-4. CHASSIS SECTION-1



Ref. No.	Part No.	Description	Remark
151	1-773-042-11	WIRE (FLAT TYPE) (17 CORE)	
152	1-773-219-11	WIRE (FLAT TYPE) (25 CORE)	
153	A-4729-477-A	MAIN BOARD, COMPLETE (AEP, UK)	
153	A-4729-478-A	MAIN BOARD, COMPLETE (US, CND)	
153	A-4729-479-A	MAIN BOARD, COMPLETE (AUS)	
153	A-4729-480-A	MAIN BOARD, COMPLETE (SP)	
153	A-4730-567-A	MAIN BOARD, COMPLETE (CH)	

Ref. No.	Part No.	Description	Remark
156	4-931-757-31	SCREW (DIA. 2.6X8) (IT3B), TAPPING	
TU1	A-4303-953-A	TUNER UNIT (TCB-023//K (CE))	(AEP, UK, AUS, CH)
TU1	A-4728-019-A	TUNER UNIT (TCB-023//K (UC))	(US, CND, SP)
#1	7-685-547-14	SCREW +BTP 3X10 TYPE2 N-S	
#4	7-685-548-19	SCREW +BTP 3X12 TYPE2 N-S	
#6	7-685-546-14	SCREW +BTP 3X8 TYPE2 N-S	

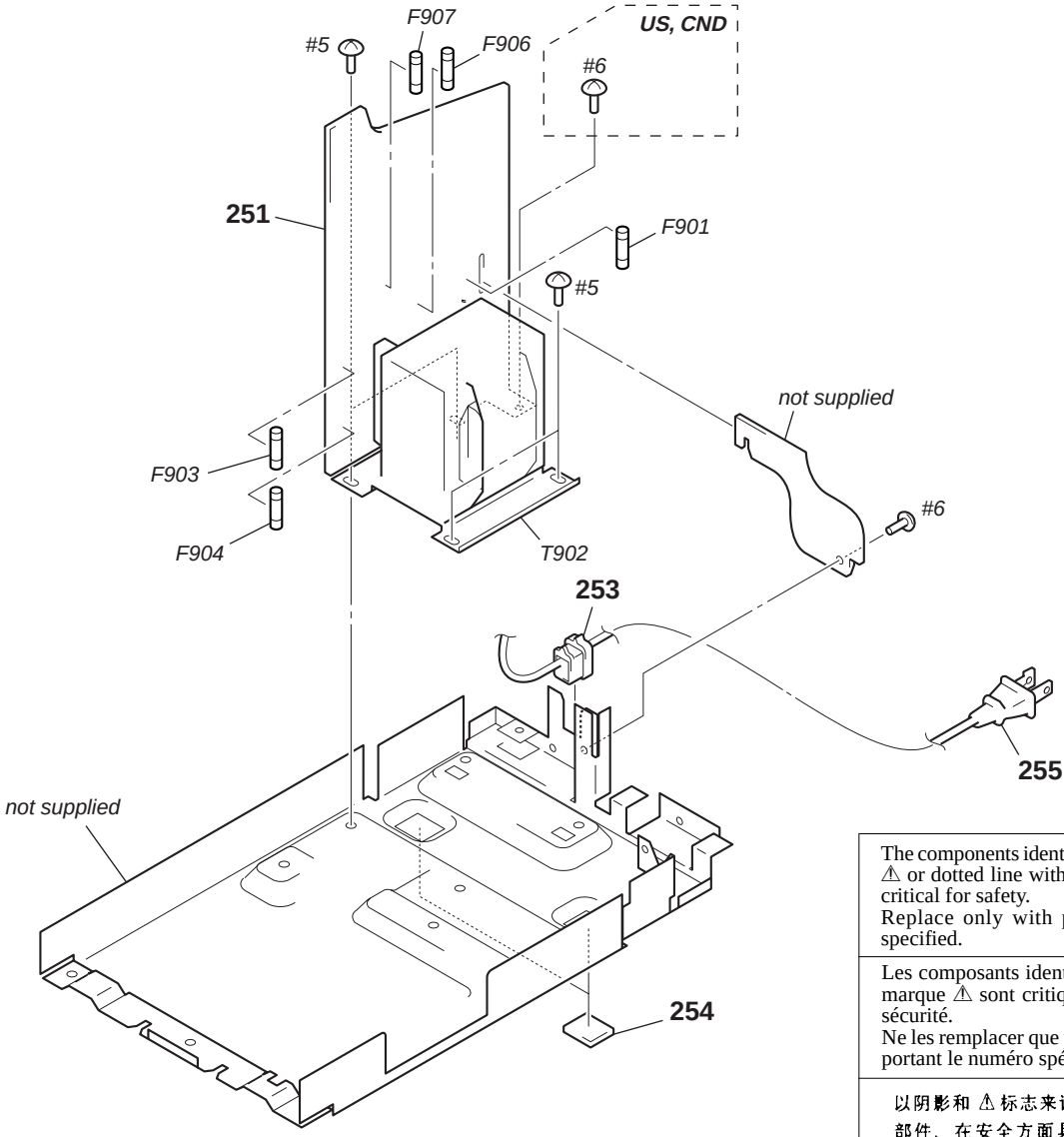
7-5. CHASSIS SECTION-2



Ref. No.	Part No.	Description	Remark
201	4-243-546-01	SHEET (CASE), SHIELD	
202	A-4729-454-A	CONTROL BOARD, COMPLETE (AEP, UK)	
202	A-4729-455-A	CONTROL BOARD, COMPLETE (US, CND)	
202	A-4729-456-A	CONTROL BOARD, COMPLETE (SP, AUS)	
202	A-4730-560-A	CONTROL BOARD, COMPLETE (CH)	
203	X-4954-647-1	LID ASSY, CD (US, CND, AEP, UK, CH)	
203	X-4954-821-1	LID ASSY, CD (SP, AUS)	
204	1-824-375-11	WIRE (FLAT TYPE) (FFC) (10 CORE)	
205	4-931-757-31	SCREW (DIA. 2.6X8) (IT3B), TAPPING	
206	1-824-590-11	WIRE (FLAT TYPE) (FFC) (5 CORE)	
207	1-824-591-11	WIRE (FLAT TYPE) (FFC) (6 CORE)	
208	A-4729-472-A	DAC BOARD, COMPLETE (EXCEPT CH)	

Ref. No.	Part No.	Description	Remark
208	A-4730-565-A	DAC BOARD, COMPLETE (CH)	
209	1-824-592-11	WIRE (FLAT TYPE) (FFC) (13 CORE)	
210	A-4729-462-A	DVD BOARD, COMPLETE (AEP)	
210	A-4729-463-A	DVD BOARD, COMPLETE (UK)	
210	A-4729-464-A	DVD BOARD, COMPLETE (US, CND)	
210	A-4729-465-A	DVD BOARD, COMPLETE (AUS)	
210	A-4729-466-A	DVD BOARD, COMPLETE (SP)	
210	A-4730-563-A	DVD BOARD, COMPLETE (CH)	
211	3-228-738-01	SHEET (D)	
212	1-824-378-11	WIRE (FLAT TYPE) (FFC) (25 CORE)	
#3	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	
#7	7-685-545-14	SCREW +BTP 3X6 TYPE2 N-S	

7-6. CHASSIS SECTION-3



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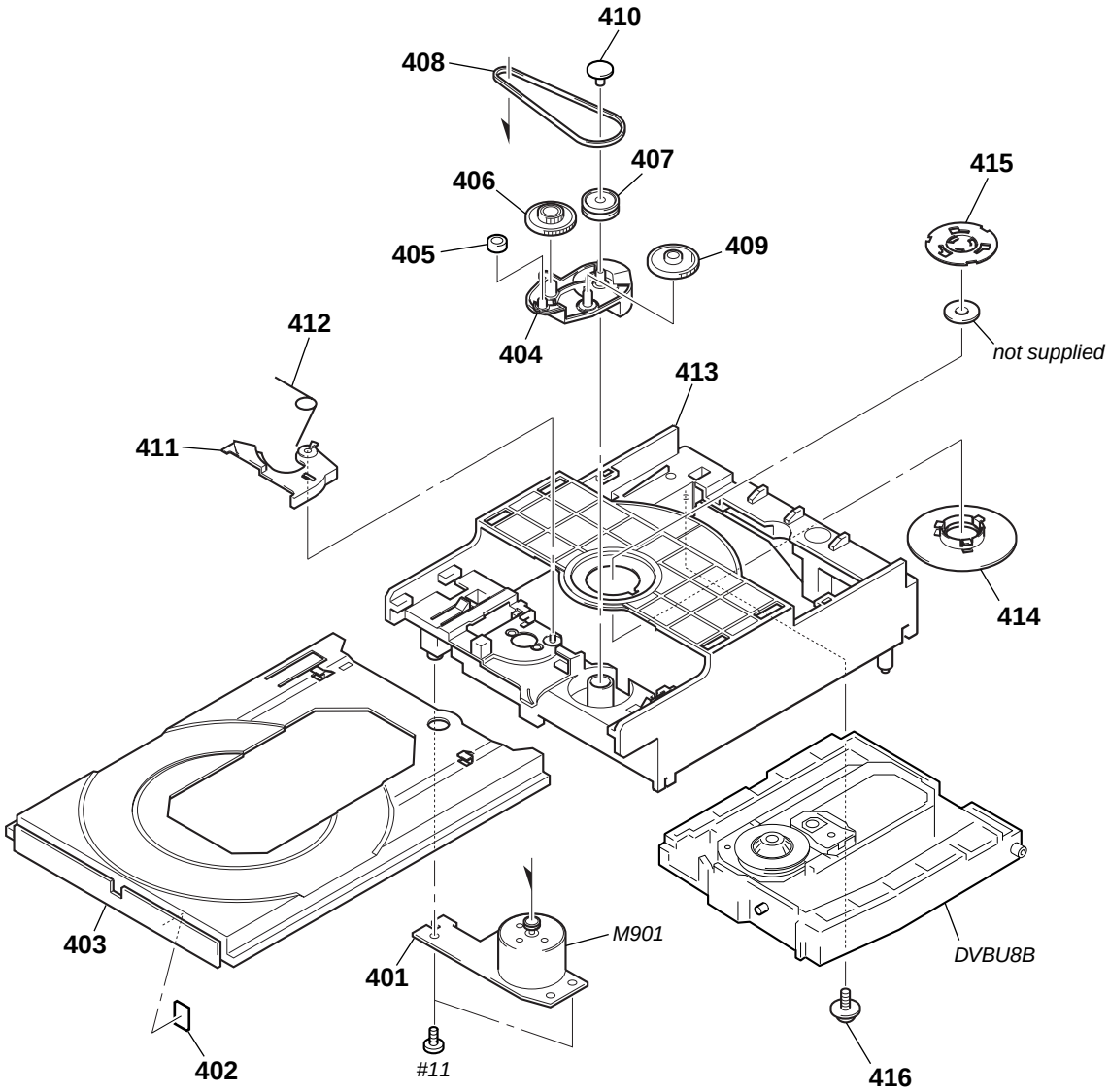
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiquens pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

以阴影和 ⚠ 标志来识别的零部件，在安全方面具有关键性，因此只能以规定号码的零部件来更换。

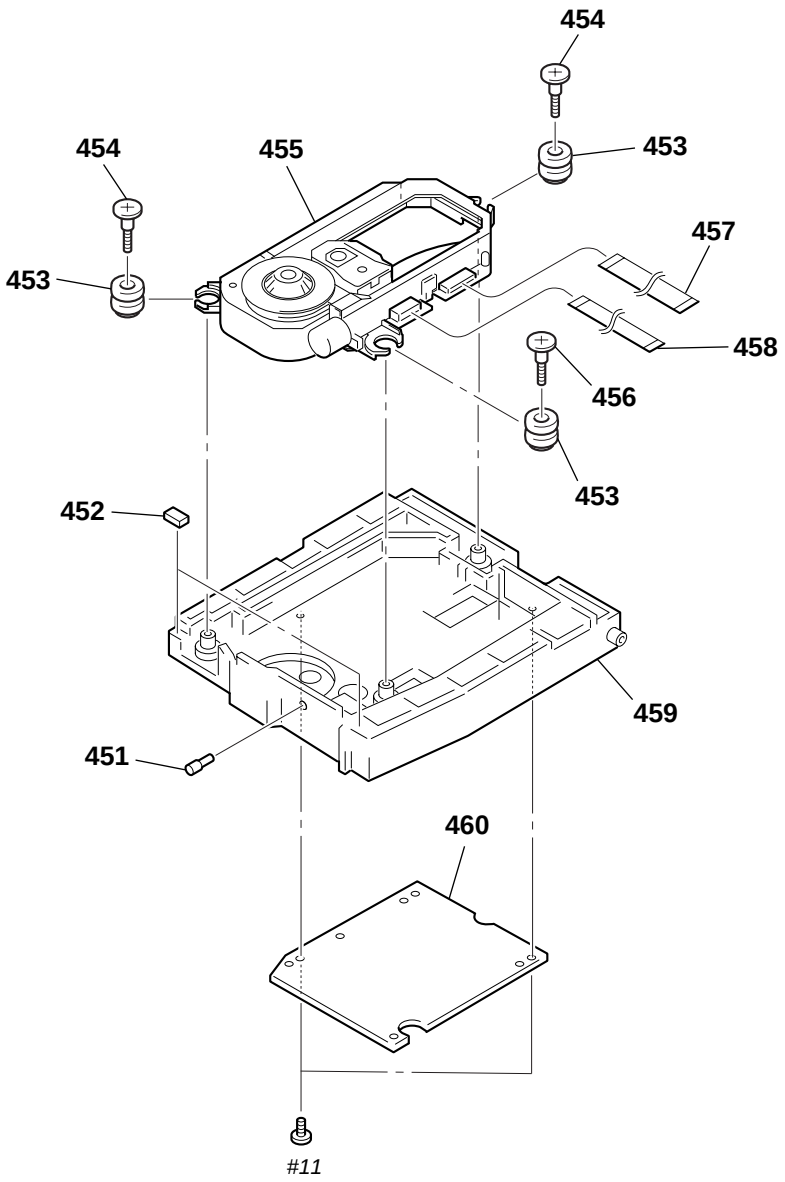
Ref. No.	Part No.	Description	Remark
251	A-4729-473-A	POWER BOARD, COMPLETE (AEP, UK, AUS)	
251	A-4729-474-A	POWER BOARD, COMPLETE (US, CND)	
251	A-4729-475-A	POWER BOARD, COMPLETE (SP)	
251	A-4730-566-A	POWER BOARD, COMPLETE (CH)	
* 253	3-703-244-00	BUSHING (2104), CORD (CH)	
253	4-217-350-11	STOPPER, CORD (EXCEPT CH)	
254	4-232-478-01	FOOT	
⚠255	1-696-169-11	CORD, POWER (AEP, UK, SP)	
⚠255	1-696-848-42	CORD, POWER (AUS)	
⚠255	1-782-464-21	CORD, POWER (CH)	
⚠255	1-783-531-72	CORD, POWER (US, CND)	
⚠F901	1-533-467-11	FUSE, GLASS TUBE (DIA. 5) (T1.6AL/250V)	(SP)
⚠F903	1-533-450-11	FUSE, GLASS TUBE (DIA. 5) (2.5A/125V)	(US, CND)
⚠F903	1-533-469-11	FUSE, GLASS TUBE (DIA. 5) (T2.5AL/250V)	(AEP, UK, SP, AUS, CH)
⚠F904	1-533-450-11	FUSE, GLASS TUBE (DIA. 5) (2.5A/125V)	(US, CND)
⚠F904	1-533-469-11	FUSE, GLASS TUBE (DIA. 5) (T2.5AL/250V)	(AEP, UK, SP, AUS, CH)
⚠F906	1-533-450-11	FUSE, GLASS TUBE (DIA. 5) (2.5A/125V)	(US, CND)
⚠F906	1-533-469-11	FUSE, GLASS TUBE (DIA. 5) (T2.5AL/250V)	(AEP, UK, SP, AUS, CH)
⚠F907	1-533-450-11	FUSE, GLASS TUBE (DIA. 5) (2.5A/125V)	(US, CND)
⚠F907	1-533-469-11	FUSE, GLASS TUBE (DIA. 5) (T2.5AL/250V)	(AEP, UK, SP, AUS, CH)
⚠T902	1-437-853-11	TRANSFORMER, POWER (AEP, UK, AUS, CH)	
⚠T902	1-437-854-11	TRANSFORMER, POWER (US, CND)	
⚠T902	1-437-855-11	TRANSFORMER, POWER (SP)	
#5	7-685-659-14	SCREW +BVTP 4X8 TYPE2 N-S	
#6	7-685-546-14	SCREW +BTP 3X8 TYPE2 N-S	

7-7. MECHANISM DECK SECTION (CDM55D-DVBU8B)



Ref. No.	Part No.	Description	Remark
401	1-676-599-11	LOADING BOARD	
402	4-925-315-31	DAMPER	
403	4-224-894-02	TRAY (CDM55D)	
404	4-220-233-01	CAM (CDM55)	
405	4-221-815-01	ROLLER	
406	4-220-237-01	GEAR (A)	
407	4-220-234-01	PULLEY (LDG)	
408	4-221-816-01	BELT (CDM55)	
409	4-220-238-01	GEAR (B)	
410	4-227-598-01	SPACER (55)	
411	4-220-229-01	LEVER (SW)	
412	4-220-239-01	SPRING, TORSION	
413	4-225-884-02	CHASSIS (55D)	
414	4-235-116-01	PULLEY (A-240)	
415	4-234-766-01	PULLEY (B-240)	
416	4-985-672-01	SCREW (+PTPWHM2.6), FLOATING	
M901	A-2004-893-A	MOTOR (LD) ASSY (LOADING)	
#11	7-685-533-19	SCREW +BTP 2.6X6 TYPE2 N-S	

7-8. BASE UNIT SECTION (DVBU8B)



The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.	以阴影和 ⚠ 标志来识别的零部件，在安全方面具有关键性，因此只能以规定号码的零部件来更换。

Ref. No.	Part No.	Description	Remark
451	4-221-817-02	SHAFT (BU)	
452	4-925-315-31	DAMPER	
453	3-053-847-31	INSULATOR	
454	4-981-923-01	SCREW (M), STEP	
⚠455	8-820-144-06	DEVICE, OPTICAL KHM-240AAA/J1RP (TYPE A)	
⚠455	A-6062-709-A	SERVICE ASSY, KHM-270AAA (TYPE B)	
456	4-236-450-01	SCREW (L), STEP	
457	1-823-072-11	CABLE, FLEXIBLE FLAT 26P	
458	1-823-073-11	CABLE, FLEXIBLE FLAT (9 CORE)	
459	4-234-374-01	HOLDER (KHM-240)	
460	A-4726-850-A	RF-240 BOARD, COMPLETE	
#11	7-685-533-19	SCREW +BTP 2.6X6 TYPE2 N-S	

SECTION 8
ELECTRICAL PARTS LIST

CONTROL (Suffix-11)

NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL: Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F: nonflammable
- Abbreviation
  AUS : Australian model CND : Canadian model
  CH : Chiense model SP : Singapore model
- Items marked "*" are not stocked since they are seldom required for routine service.
  Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u: µ, for example:
  uA. . : µA. . uPA. . : µPA. .
  uPB. . : µPB. . uPC. . : µPC. .
  uPD. . : µPD. .
- CAPACITORS
  uF: µF
- COILS
  uH: µH
- Refer to servicing notes (page 8) for discrimination of TYPE A/B.

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety.
Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiquens pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

以阴影和 ⚠ 标志来识别的零部件，在安全方面具有关键性，因此只能以规定号码的零部件来更换。

When indicating parts by reference number, please include the board.

Ref. No.	Part No.	Description			Remark
	A-4729-454-A	CONTROL BOARD, COMPLETE (AEP, UK)			
	A-4729-455-A	CONTROL BOARD, COMPLETE (US, CND)			
	A-4729-456-A	CONTROL BOARD, COMPLETE (SP, AUS)			
		**********			
		< CAPACITOR >			
C314	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C401	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C611	1-124-584-00	ELECT	100uF	20%	10V
C615	1-126-963-11	ELECT	100uF	20%	16V
C640	1-124-584-00	ELECT	100uF	20%	10V
C641	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C642	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C643	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C644	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C645	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C646	1-124-584-00	ELECT	100uF	20%	10V
C647	1-126-933-11	ELECT	100uF	20%	16V
C648	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C649	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C650	1-126-160-11	ELECT	1uF	20%	50V
C668	1-104-905-11	CAPACITOR	0.22F		5.5V
C673	1-124-234-00	ELECT	22uF	20%	16V
C690	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C801	1-162-918-11	CERAMIC CHIP	18PF	5%	50V
C802	1-164-160-11	CERAMIC CHIP	20PF	5%	50V
C803	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C804	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C824	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
		< CONNECTOR >			
CN506	1-779-281-11	CONNECTOR, FFC (LIF (NON-ZIF)) 13P			
CN507	1-779-278-11	CONNECTOR, FFC (LIF (NON-ZIF)) 10P			
CN801	1-568-838-11	CONNECTOR, FFC 21P			
* CN802	1-506-988-11	PIN, CONNECTOR (PC BOARD) 6P			
CN803	1-779-274-11	CONNECTOR, FFC (LIF (NON-ZIF)) 6P			
CN804	1-784-778-11	CONNECTOR, FFC 17P			
CN806	1-784-786-11	CONNECTOR, FFC 25P			
* CN809	1-506-985-11	PIN, CONNECTOR (PC BOARD) 3P			
		< DIODE >			
D333	8-719-991-33	DIODE 1SS133T-77			
D334	8-719-200-82	DIODE 11ES2			
D602	8-719-991-33	DIODE 1SS133T-77			
D604	8-719-991-33	DIODE 1SS133T-77			
D620	8-719-991-33	DIODE 1SS133T-77			
D622	8-719-991-33	DIODE 1SS133T-77			
D623	8-719-991-33	DIODE 1SS133T-77			
D624	8-719-991-33	DIODE 1SS133T-77			
		< FERRITE BEAD >			
FB626	1-469-144-21	FERRITE	0uH		
FB627	1-469-144-21	FERRITE	0uH		
FB628	1-469-144-21	FERRITE	0uH		
FB629	1-469-144-21	FERRITE	0uH		
		< IC >			
IC302	8-759-491-32	IC TC74VHCT04AF (EL)			
IC306	6-801-363-01	IC M30620MCN-A11FP			
IC602	8-759-533-04	IC M62703ML-E1			
IC605	8-759-686-72	IC uPC29L04J-T			
IC614	8-759-646-52	IC KIA7805API			
		< SHORT >			
JR100	1-216-864-11	SHORT CHIP	0		
JR101	1-216-864-11	SHORT CHIP	0		
JR102	1-216-864-11	SHORT CHIP	0		
JR103	1-216-864-11	SHORT CHIP	0		
JR302	1-216-864-11	SHORT CHIP	0		
JR304	1-216-864-11	SHORT CHIP	0		
JR305	1-216-864-11	SHORT CHIP	0		
JR306	1-216-864-11	SHORT CHIP	0		
JR307	1-216-864-11	SHORT CHIP	0		
JR604	1-216-864-11	SHORT CHIP	0		
JR605	1-216-864-11	SHORT CHIP	0		
JR606	1-216-864-11	SHORT CHIP	0		
		< COIL >			
L301	1-412-002-31	INDUCTOR	4.7uH		
L302	1-412-002-31	INDUCTOR	4.7uH		
L303	1-410-324-11	INDUCTOR	4.7uH		
		< TRANSISTOR >			
Q618	8-729-055-91	TRANSISTOR	SRA2202SF		
Q619	8-729-034-51	TRANSISTOR	KTC3875		
Q635	8-729-037-02	TRANSISTOR	KTA1266Y-AT		
Q637	8-729-055-94	TRANSISTOR	SRC1202SF		

CONTROL (Suffix-11)

Ref. No.	Part No.	Description			Remark
		< RESISTOR >			
R102	1-216-841-11	METAL CHIP	47K	5%	1/10W
R103	1-216-833-11	METAL CHIP	10K	5%	1/10W
R104	1-216-833-11	METAL CHIP	10K	5%	1/10W
R119	1-216-833-11	METAL CHIP	10K	5%	1/10W
R121	1-216-833-11	METAL CHIP	10K	5%	1/10W
R128	1-216-833-11	METAL CHIP	10K	5%	1/10W
R362	1-216-845-11	METAL CHIP	100K	5%	1/10W
R389	1-216-825-11	METAL CHIP	2.2K	5%	1/10W (US, CND)
R389	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (SP, AUS)
R389	1-216-864-11	SHORT CHIP	0 (AEP, UK)		
R401	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R402	1-216-821-11	METAL CHIP	1K	5%	1/10W
R403	1-216-821-11	METAL CHIP	1K	5%	1/10W
R404	1-216-821-11	METAL CHIP	1K	5%	1/10W
R405	1-216-821-11	METAL CHIP	1K	5%	1/10W
R406	1-216-821-11	METAL CHIP	1K	5%	1/10W
R407	1-216-821-11	METAL CHIP	1K	5%	1/10W
R409	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R417	1-216-833-11	METAL CHIP	10K	5%	1/10W
R418	1-216-821-11	METAL CHIP	1K	5%	1/10W
R419	1-216-821-11	METAL CHIP	1K	5%	1/10W
R420	1-216-821-11	METAL CHIP	1K	5%	1/10W
R422	1-216-821-11	METAL CHIP	1K	5%	1/10W
R423	1-216-821-11	METAL CHIP	1K	5%	1/10W
R425	1-216-821-11	METAL CHIP	1K	5%	1/10W
R427	1-216-821-11	METAL CHIP	1K	5%	1/10W
R429	1-216-809-11	METAL CHIP	100	5%	1/10W
R430	1-216-809-11	METAL CHIP	100	5%	1/10W
R433	1-216-821-11	METAL CHIP	1K	5%	1/10W
R435	1-216-821-11	METAL CHIP	1K	5%	1/10W
R436	1-216-821-11	METAL CHIP	1K	5%	1/10W
R437	1-216-821-11	METAL CHIP	1K	5%	1/10W
R438	1-216-821-11	METAL CHIP	1K	5%	1/10W
R439	1-216-821-11	METAL CHIP	1K	5%	1/10W
R440	1-216-821-11	METAL CHIP	1K	5%	1/10W
R441	1-216-821-11	METAL CHIP	1K	5%	1/10W
R442	1-216-864-11	SHORT CHIP	0		
R443	1-216-821-11	METAL CHIP	1K	5%	1/10W
R444	1-216-821-11	METAL CHIP	1K	5%	1/10W
R445	1-216-821-11	METAL CHIP	1K	5%	1/10W
R446	1-216-821-11	METAL CHIP	1K	5%	1/10W
R447	1-216-821-11	METAL CHIP	1K	5%	1/10W
R448	1-216-821-11	METAL CHIP	1K	5%	1/10W
R449	1-216-821-11	METAL CHIP	1K	5%	1/10W
R450	1-216-821-11	METAL CHIP	1K	5%	1/10W
R451	1-216-821-11	METAL CHIP	1K	5%	1/10W
R454	1-216-821-11	METAL CHIP	1K	5%	1/10W
R456	1-216-821-11	METAL CHIP	1K	5%	1/10W
R457	1-216-821-11	METAL CHIP	1K	5%	1/10W
R458	1-216-821-11	METAL CHIP	1K	5%	1/10W
R459	1-216-821-11	METAL CHIP	1K	5%	1/10W
R460	1-216-821-11	METAL CHIP	1K	5%	1/10W
R465	1-216-809-11	METAL CHIP	100	5%	1/10W
R469	1-216-821-11	METAL CHIP	1K	5%	1/10W
R470	1-216-821-11	METAL CHIP	1K	5%	1/10W

CONTROL (Suffix-12)

Ref. No.	Part No.	Description			Remark
R474	1-216-821-11	METAL CHIP	1K	5%	1/10W
R475	1-216-821-11	METAL CHIP	1K	5%	1/10W
R480	1-216-821-11	METAL CHIP	1K	5%	1/10W
R481	1-216-821-11	METAL CHIP	1K	5%	1/10W
R484	1-216-821-11	METAL CHIP	1K	5%	1/10W
R486	1-216-821-11	METAL CHIP	1K	5%	1/10W
R487	1-216-821-11	METAL CHIP	1K	5%	1/10W
R488	1-216-821-11	METAL CHIP	1K	5%	1/10W
R489	1-216-821-11	METAL CHIP	1K	5%	1/10W
R490	1-216-821-11	METAL CHIP	1K	5%	1/10W
R491	1-216-821-11	METAL CHIP	1K	5%	1/10W
R492	1-216-821-11	METAL CHIP	1K	5%	1/10W
R493	1-216-864-11	SHORT CHIP	0		
R494	1-216-821-11	METAL CHIP	1K	5%	1/10W
R495	1-216-821-11	METAL CHIP	1K	5%	1/10W
R496	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (US, CND, AEP, UK)
R496	1-216-864-11	SHORT CHIP	0 (SP, AUS)		
R497	1-216-821-11	METAL CHIP	1K	5%	1/10W
R498	1-216-821-11	METAL CHIP	1K	5%	1/10W
R499	1-216-821-11	METAL CHIP	1K	5%	1/10W
R601	1-216-833-11	METAL CHIP	10K	5%	1/10W
R603	1-216-837-11	METAL CHIP	22K	5%	1/10W
R626	1-216-815-11	METAL CHIP	330	5%	1/10W
R627	1-216-833-11	METAL CHIP	10K	5%	1/10W
R629	1-216-841-11	METAL CHIP	47K	5%	1/10W
R632	1-216-841-11	METAL CHIP	47K	5%	1/10W
R633	1-216-837-11	METAL CHIP	22K	5%	1/10W
R634	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R635	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R636	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R670	1-216-841-11	METAL CHIP	47K	5%	1/10W
R671	1-216-821-11	METAL CHIP	1K	5%	1/10W
R672	1-249-415-11	CARBON	680	5%	1/4W
		< VIBRATOR >			
X801	1-567-098-41	VIBRATOR, CRYSTAL (32.768kHz)			
X802	1-781-107-21	VIBRATOR, CERAMIC (16MHz)			
**********					
	A-4729-454-A	CONTROL BOARD, COMPLETE (AEP, UK)			
	A-4729-455-A	CONTROL BOARD, COMPLETE (US, CND)			
	A-4729-456-A	CONTROL BOARD, COMPLETE (SP, AUS)			
	A-4730-560-A	CONTROL BOARD, COMPLETE (CH)			
		**********			
		< CAPACITOR >			
C314	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C401	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C611	1-124-584-00	ELECT	100uF	20%	10V
C615	1-126-963-11	ELECT	100uF	20%	16V
C640	1-124-584-00	ELECT	100uF	20%	10V
C641	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C642	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C643	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C644	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C645	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C646	1-124-584-00	ELECT	100uF	20%	10V

CONTROL (Suffix-12)

Ref. No.	Part No.	Description			Remark
C647	1-126-933-11	ELECT	100uF	20%	16V
C648	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C649	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C650	1-126-160-11	ELECT	1uF	20%	50V
C668	1-104-905-11	CAPACITOR	0.22F		5.5V
C673	1-124-234-00	ELECT	22uF	20%	16V
C690	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C801	1-162-918-11	CERAMIC CHIP	18PF	5%	50V
C802	1-164-160-11	CERAMIC CHIP	20PF	5%	50V
C803	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C804	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C824	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
		< CONNECTOR >			
CN506	1-779-281-11	CONNECTOR, FFC (LIF (NON-ZIF)) 13P			
CN507	1-779-278-11	CONNECTOR, FFC (LIF (NON-ZIF)) 10P			
CN801	1-568-838-11	CONNECTOR, FFC 21P			
* CN802	1-506-988-11	PIN, CONNECTOR (PC BOARD) 6P			
CN803	1-779-274-11	CONNECTOR, FFC (LIF (NON-ZIF)) 6P			
CN804	1-784-778-11	CONNECTOR, FFC 17P			
CN806	1-784-786-11	CONNECTOR, FFC 25P			
* CN809	1-506-985-11	PIN, CONNECTOR (PC BOARD) 3P			
		< DIODE >			
D333	8-719-991-33	DIODE 1SS133T-77			
D334	8-719-200-82	DIODE 11ES2			
D602	8-719-991-33	DIODE 1SS133T-77			
D604	8-719-991-33	DIODE 1SS133T-77			
D620	8-719-991-33	DIODE 1SS133T-77			
D622	8-719-991-33	DIODE 1SS133T-77			
D623	8-719-991-33	DIODE 1SS133T-77			
D624	8-719-991-33	DIODE 1SS133T-77			
		< FERRITE BEAD >			
FB626	1-469-144-21	FERRITE	0uH		
FB627	1-469-144-21	FERRITE	0uH		
FB628	1-469-144-21	FERRITE	0uH		
FB629	1-469-144-21	FERRITE	0uH		
		< IC >			
IC302	8-759-491-32	IC TC74VHCT04AF (EL)			
IC306	6-801-363-01	IC M30620MCN-A11FP			
IC602	8-759-533-04	IC M62703ML-E1			
IC605	8-759-686-72	IC uPC29L04J-T			
IC614	8-759-646-52	IC KIA7805API			
		< SHORT >			
JR100	1-216-864-11	SHORT CHIP	0		
JR101	1-216-864-11	SHORT CHIP	0		
JR102	1-216-864-11	SHORT CHIP	0		
JR103	1-216-864-11	SHORT CHIP	0		
JR302	1-216-864-11	SHORT CHIP	0		
JR304	1-216-864-11	SHORT CHIP	0		
JR305	1-216-864-11	SHORT CHIP	0		
JR306	1-216-864-11	SHORT CHIP	0		
JR307	1-216-864-11	SHORT CHIP	0		
JR604	1-216-864-11	SHORT CHIP	0		
JR605	1-216-864-11	SHORT CHIP	0		
JR606	1-216-864-11	SHORT CHIP	0		
		< COIL >			
L301	1-412-002-31	INDUCTOR	4.7uH		
L302	1-412-002-31	INDUCTOR	4.7uH		
L303	1-410-324-11	INDUCTOR	4.7uH		
		< TRANSISTOR >			
Q618	8-729-055-91	TRANSISTOR	SRA2202SF		
Q619	8-729-034-51	TRANSISTOR	KTC3875		
Q635	8-729-037-02	TRANSISTOR	KTA1266Y-AT		
Q637	8-729-055-94	TRANSISTOR	SRC1202SF		
		< RESISTOR >			
R102	1-216-841-11	METAL CHIP	47K	5%	1/10W
R103	1-216-833-11	METAL CHIP	10K	5%	1/10W
R104	1-216-833-11	METAL CHIP	10K	5%	1/10W
R119	1-216-833-11	METAL CHIP	10K	5%	1/10W
R121	1-216-833-11	METAL CHIP	10K	5%	1/10W
R128	1-216-833-11	METAL CHIP	10K	5%	1/10W
R362	1-216-845-11	METAL CHIP	100K	5%	1/10W
R389	1-216-815-11	METAL CHIP	330	5%	1/10W (CH)
R389	1-216-825-11	METAL CHIP	2.2K	5%	1/10W (US, CND)
R389	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (SP, AUS)
R389	1-216-864-11	SHORT CHIP	0 (AEP, UK)		
R401	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R402	1-216-821-11	METAL CHIP	1K	5%	1/10W
R403	1-216-821-11	METAL CHIP	1K	5%	1/10W
R404	1-216-821-11	METAL CHIP	1K	5%	1/10W
R405	1-216-821-11	METAL CHIP	1K	5%	1/10W
R406	1-216-821-11	METAL CHIP	1K	5%	1/10W
R407	1-216-821-11	METAL CHIP	1K	5%	1/10W
R409	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R417	1-216-833-11	METAL CHIP	10K	5%	1/10W
R418	1-216-821-11	METAL CHIP	1K	5%	1/10W
R419	1-216-821-11	METAL CHIP	1K	5%	1/10W
R420	1-216-821-11	METAL CHIP	1K	5%	1/10W
R422	1-216-821-11	METAL CHIP	1K	5%	1/10W
R423	1-216-821-11	METAL CHIP	1K	5%	1/10W
R425	1-216-821-11	METAL CHIP	1K	5%	1/10W
R427	1-216-821-11	METAL CHIP	1K	5%	1/10W
R429	1-216-809-11	METAL CHIP	100	5%	1/10W
R430	1-216-809-11	METAL CHIP	100	5%	1/10W
R433	1-216-821-11	METAL CHIP	1K	5%	1/10W
R435	1-216-821-11	METAL CHIP	1K	5%	1/10W
R436	1-216-821-11	METAL CHIP	1K	5%	1/10W
R437	1-216-821-11	METAL CHIP	1K	5%	1/10W
R438	1-216-821-11	METAL CHIP	1K	5%	1/10W
R439	1-216-821-11	METAL CHIP	1K	5%	1/10W
R440	1-216-821-11	METAL CHIP	1K	5%	1/10W
R441	1-216-821-11	METAL CHIP	1K	5%	1/10W
R442	1-216-864-11	SHORT CHIP	0		
R443	1-216-821-11	METAL CHIP	1K	5%	1/10W
R444	1-216-821-11	METAL CHIP	1K	5%	1/10W
R445	1-216-821-11	METAL CHIP	1K	5%	1/10W

CONTROL (Suffix-12) DAC

Ref. No.	Part No.	Description			Remark
R446	1-216-821-11	METAL CHIP	1K	5%	1/10W
R447	1-216-821-11	METAL CHIP	1K	5%	1/10W
R448	1-216-821-11	METAL CHIP	1K	5%	1/10W
R449	1-216-821-11	METAL CHIP	1K	5%	1/10W
R450	1-216-821-11	METAL CHIP	1K	5%	1/10W
R451	1-216-821-11	METAL CHIP	1K	5%	1/10W
R454	1-216-821-11	METAL CHIP	1K	5%	1/10W
R456	1-216-821-11	METAL CHIP	1K	5%	1/10W
R457	1-216-821-11	METAL CHIP	1K	5%	1/10W
R458	1-216-821-11	METAL CHIP	1K	5%	1/10W
R459	1-216-821-11	METAL CHIP	1K	5%	1/10W
R460	1-216-821-11	METAL CHIP	1K	5%	1/10W
R465	1-216-809-11	METAL CHIP	100	5%	1/10W
R469	1-216-821-11	METAL CHIP	1K	5%	1/10W
R470	1-216-821-11	METAL CHIP	1K	5%	1/10W
R474	1-216-821-11	METAL CHIP	1K	5%	1/10W
R475	1-216-821-11	METAL CHIP	1K	5%	1/10W
R480	1-216-821-11	METAL CHIP	1K	5%	1/10W
R481	1-216-821-11	METAL CHIP	1K	5%	1/10W
R484	1-216-821-11	METAL CHIP	1K	5%	1/10W
R486	1-216-821-11	METAL CHIP	1K	5%	1/10W
R487	1-216-821-11	METAL CHIP	1K	5%	1/10W
R488	1-216-821-11	METAL CHIP	1K	5%	1/10W
R489	1-216-821-11	METAL CHIP	1K	5%	1/10W
R490	1-216-821-11	METAL CHIP	1K	5%	1/10W
R491	1-216-821-11	METAL CHIP	1K	5%	1/10W
R492	1-216-821-11	METAL CHIP	1K	5%	1/10W
R493	1-216-864-11	SHORT CHIP	0		
R494	1-216-821-11	METAL CHIP	1K	5%	1/10W
R495	1-216-821-11	METAL CHIP	1K	5%	1/10W
R496	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
			(US, CND, AEP, UK, CH)		
R496	1-216-864-11	SHORT CHIP	0 (SP, AUS)		
R497	1-216-821-11	METAL CHIP	1K	5%	1/10W
R498	1-216-821-11	METAL CHIP	1K	5%	1/10W
R499	1-216-821-11	METAL CHIP	1K	5%	1/10W
R601	1-216-833-11	METAL CHIP	10K	5%	1/10W
R603	1-216-837-11	METAL CHIP	22K	5%	1/10W
R626	1-216-815-11	METAL CHIP	330	5%	1/10W
R627	1-216-833-11	METAL CHIP	10K	5%	1/10W
R629	1-216-841-11	METAL CHIP	47K	5%	1/10W
R632	1-216-841-11	METAL CHIP	47K	5%	1/10W
R633	1-216-837-11	METAL CHIP	22K	5%	1/10W
R634	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R635	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R636	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R670	1-216-841-11	METAL CHIP	47K	5%	1/10W
R671	1-216-821-11	METAL CHIP	1K	5%	1/10W
R672	1-249-415-11	CARBON	680	5%	1/4W
		< VIBRATOR >			
X801	1-567-098-41	VIBRATOR, CRYSTAL (32.768kHz)			
X802	1-781-107-21	VIBRATOR, CERAMIC (16MHz)			

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Ref. No.	Part No.	Description			Remark
	A-4729-472-A	DAC BOARD, COMPLETE (EXCEPT CH)			
	A-4730-565-A	DAC BOARD, COMPLETE (CH)			
		**********			
		< CAPACITOR/SHORT >			
C301	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C302	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C305	1-126-191-11	ELECT CHIP	0.47uF	20%	50V
C306	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C307	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C308	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C309	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C310	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C311	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C312	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C313	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C314	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C315	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C316	1-126-204-11	ELECT CHIP	47uF	20%	16V
C317	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C318	1-126-204-11	ELECT CHIP	47uF	20%	16V
C319	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C320	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C330	1-162-961-11	CERAMIC CHIP	330PF	10%	50V
		< CONNECTOR >			
CN300	1-784-857-21	CONNECTOR, FFC (LIF (NON-ZIF)) 5P			
CN301	1-784-865-01	CONNECTOR, FFC (LIF (NON-ZIF)) 13P			
		< DIODE >			
D303	8-719-988-61	DIODE 1SS355TE-17			
D304	8-719-988-61	DIODE 1SS355TE-17			
D305	8-719-988-61	DIODE 1SS355TE-17			
		< FERRITE BEAD >			
FB300	1-469-144-21	FERRITE	0uH		
FB301	1-469-144-21	FERRITE	0uH		
FB302	1-469-144-21	FERRITE	0uH		
FB303	1-469-144-21	FERRITE	0uH		
FB304	1-469-144-21	FERRITE	0uH		
FB305	1-469-144-21	FERRITE	0uH		
FB306	1-469-144-21	FERRITE	0uH		
FB307	1-469-144-21	FERRITE	0uH		
FB308	1-469-144-21	FERRITE	0uH		
FB309	1-469-144-21	FERRITE	0uH		
FB310	1-469-144-21	FERRITE	0uH		
FB311	1-469-144-21	FERRITE	0uH		
FB313	1-469-144-21	FERRITE	0uH		
FB314	1-469-144-21	FERRITE	0uH		
FB315	1-469-144-21	FERRITE	0uH		
FB316	1-469-144-21	FERRITE	0uH		
FB317	1-469-144-21	FERRITE	0uH		
FB318	1-469-144-21	FERRITE	0uH		
FB319	1-469-144-21	FERRITE	0uH		
FB320	1-469-144-21	FERRITE	0uH		
FB321	1-469-144-21	FERRITE	0uH		
FB322	1-469-144-21	FERRITE	0uH		

DAC **DVD (Suffix-21)**

Ref. No.	Part No.	Description			Remark
		< IC >			
IC301	8-759-096-87	IC TC7WU04FU (TE12R)			
IC302	8-759-675-77	IC uDA1350AH			
		< SHORT >			
JR311	1-216-864-11	SHORT CHIP	0		
		< TRANSISTOR >			
Q302	8-729-026-49	TRANSISTOR	2SA1037AK-T146-R		
Q303	8-729-055-94	TRANSISTOR	SRC1202SF		
Q306	8-729-055-94	TRANSISTOR	SRC1202SF		
Q307	8-729-026-49	TRANSISTOR	2SA1037AK-T146-R		
		< RESISTOR/FERRITE BEAD >			
R303	1-216-809-11	METAL CHIP	100	5%	1/10W
R304	1-216-864-11	SHORT CHIP	0		
R305	1-216-864-11	SHORT CHIP	0		
R307	1-216-833-11	METAL CHIP	10K	5%	1/10W
R308	1-216-833-11	METAL CHIP	10K	5%	1/10W
R309	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R310	1-216-833-11	METAL CHIP	10K	5%	1/10W
R312	1-216-809-11	METAL CHIP	100	5%	1/10W
R313	1-216-821-11	METAL CHIP	1K	5%	1/10W
R315	1-216-864-11	SHORT CHIP	0		
R316	1-216-864-11	SHORT CHIP	0		
R319	1-469-144-21	FERRITE	0uH		
R320	1-216-864-11	SHORT CHIP	0		
R323	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R326	1-216-833-11	METAL CHIP	10K	5%	1/10W
R327	1-216-809-11	METAL CHIP	100	5%	1/10W
R328	1-216-864-11	SHORT CHIP	0		
R329	1-216-845-11	METAL CHIP	100K	5%	1/10W
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	A-4729-462-A	DVD BOARD, COMPLETE (AEP)			
	A-4729-463-A	DVD BOARD, COMPLETE (UK)			
	A-4729-464-A	DVD BOARD, COMPLETE (US, CND)			
	A-4729-465-A	DVD BOARD, COMPLETE (AUS)			
	A-4729-466-A	DVD BOARD, COMPLETE (SP)			
		**********			
		< CAPACITOR >			
C004	1-126-204-11	ELECT CHIP	47uF	20%	16V
C005	1-126-246-11	ELECT CHIP	220uF	20%	4V
C006	1-126-204-11	ELECT CHIP	47uF	20%	16V
C007	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
C018	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C019	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C103	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C104	1-126-209-11	ELECT CHIP	100uF	20%	4V
C105	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C106	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C107	1-162-916-11	CERAMIC CHIP	12PF	5%	50V
C108	1-162-916-11	CERAMIC CHIP	12PF	5%	50V
C109	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C110	1-126-209-11	ELECT CHIP	100uF	20%	4V
C111	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V

Ref. No.	Part No.	Description			Remark
C112	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C113	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C114	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C116	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C119	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C124	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C301	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C304	1-126-246-11	ELECT CHIP	220uF	20%	4V
C305	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C306	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C307	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C309	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C310	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C311	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C312	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C313	1-164-677-11	CERAMIC CHIP	0.033uF	10%	16V
C315	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C317	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C318	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C319	1-110-563-11	CERAMIC CHIP	0.068uF	10%	16V
C320	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C321	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C322	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C323	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C324	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C325	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C326	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C327	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C328	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C331	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C332	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C333	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C334	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C335	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C336	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C337	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C338	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C339	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C340	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C341	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C342	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C343	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C344	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C345	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C346	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C347	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C348	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C349	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C350	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C351	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C352	1-126-204-11	ELECT CHIP	47uF	20%	16V
C401	1-164-245-11	CERAMIC CHIP	0.015uF	10%	25V
C402	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C403	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C404	1-162-965-11	CERAMIC CHIP	0.0015uF	10%	50V
C405	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C406	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C407	1-162-960-11	CERAMIC CHIP	220PF	10%	50V

DVD (Suffix-21)

Ref. No.	Part No.	Description			Remark
C408	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C411	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C412	1-164-677-11	CERAMIC CHIP	0.033uF	10%	16V
C413	1-164-677-11	CERAMIC CHIP	0.033uF	10%	16V
C414	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C415	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C416	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C417	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C418	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C419	1-126-204-11	ELECT CHIP	47uF	20%	16V
C420	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C421	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C427	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C428	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C429	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C430	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C501	1-126-193-11	ELECT CHIP	1uF	20%	50V
C502	1-117-370-11	CERAMIC CHIP	10uF		10V
C503	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C504	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C505	1-117-370-11	CERAMIC CHIP	10uF		10V
C506	1-117-370-11	CERAMIC CHIP	10uF		10V
C508	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C509	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C510	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C511	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C512	1-126-246-11	ELECT CHIP	220uF	20%	4V
C513	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C514	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C516	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C518	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C519	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C520	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C521	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C522	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C523	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C524	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C525	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C526	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C529	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C530	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C531	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C532	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C533	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C534	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C535	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C536	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C537	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C538	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C539	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C540	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C541	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C542	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C545	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C546	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C547	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C701	1-126-206-11	ELECT CHIP	100uF	20%	6.3V

Ref. No.	Part No.	Description			Remark
C702	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C711	1-162-918-11	CERAMIC CHIP	18PF	5%	50V
C712	1-162-921-11	CERAMIC CHIP	33PF	5%	50V
C716	1-162-918-11	CERAMIC CHIP	18PF	5%	50V
C717	1-162-921-11	CERAMIC CHIP	33PF	5%	50V
C721	1-162-918-11	CERAMIC CHIP	18PF	5%	50V
C722	1-162-921-11	CERAMIC CHIP	33PF	5%	50V
C741	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C742	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C743	1-124-778-00	ELECT CHIP	22uF	20%	6.3V
C744	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C745	1-124-778-00	ELECT CHIP	22uF	20%	6.3V
C764	1-126-193-11	ELECT CHIP	1uF	20%	50V
C765	1-126-193-11	ELECT CHIP	1uF	20%	50V
C766	1-126-193-11	ELECT CHIP	1uF	20%	50V
C802	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C806	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C807	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C810	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C811	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
		< CONNECTOR >			
CN008	1-774-180-11	PIN, CONNECTOR (PC BOARD) 6P			
CN009	1-784-135-11	CONNECTOR, FFC/FPC 9P			
CN010	1-784-146-11	CONNECTOR, FFC/FPC 25P			
CN011	1-778-867-21	CONNECTOR, FFC/FPC 6P			
CN101	1-784-862-21	CONNECTOR, FFC (LIF (NON-ZIF)) 10P			
* CN103	1-569-775-21	PIN, CONNECTOR (SMD) 5P			
* CN402	1-569-775-21	PIN, CONNECTOR (SMD) 5P			
* CN404	1-569-775-21	PIN, CONNECTOR (SMD) 5P			
CN801	1-784-365-21	CONNECTOR, FFC/FPC 5P			
		< FERRITE BEAD/SHORT >			
FB007	1-469-324-21	FERRITE	0uH		
FB008	1-469-324-21	FERRITE	0uH		
FB009	1-469-324-21	FERRITE	0uH		
FB010	1-469-324-21	FERRITE	0uH		
FB011	1-469-324-21	FERRITE	0uH		
FB012	1-469-324-21	FERRITE	0uH		
FB112	1-469-324-21	FERRITE	0uH		
FB113	1-216-295-00	SHORT CHIP	0		
FB114	1-216-295-00	SHORT CHIP	0		
FB711	1-216-295-00	SHORT CHIP	0		
FB712	1-216-295-00	SHORT CHIP	0		
FB714	1-216-295-00	SHORT CHIP	0		
FB801	1-216-295-00	SHORT CHIP	0		
FB802	1-216-295-00	SHORT CHIP	0		
FB803	1-216-295-00	SHORT CHIP	0		
		< FILTER >			
FL003	1-234-177-21	FILTER, CHIP EMI			
FL004	1-234-177-21	FILTER, CHIP EMI			
FL005	1-233-893-21	FILTER, CHIP EMI			
FL101	1-233-893-21	FILTER, CHIP EMI			
FL102	1-233-893-21	FILTER, CHIP EMI			
FL103	1-233-893-21	FILTER, CHIP EMI			
FL501	1-233-893-21	FILTER, CHIP EMI			
FL502	1-233-893-21	FILTER, CHIP EMI			
FL505	1-234-177-21	FILTER, CHIP EMI			

Ref. No.	Part No.	Description			Remark
		< IC >			
IC006	6-700-398-01	IC uPC2918T-E1			
IC101	8-759-640-41	IC BR24C08F-E2			
IC102	8-759-831-81	IC IMIC6001BTD			
IC103	8-759-829-75	IC MB91307APFV-G-BND-E1			
IC108	6-801-963-01	IC MR27V3202F-6BTPZ020			
IC301	8-759-599-45	IC MM1385ENLE			
IC302	8-759-828-01	IC CXD9635R			
IC303	8-759-683-75	IC MSM51V8160F-60TSKR1			
IC401	8-759-826-42	IC FAN8034			
IC501	8-759-832-30	IC TK71518ASCL			
IC502	8-759-599-45	IC MM1385ENLE			
IC503	8-752-409-87	IC CXD1933Q			
IC504	8-759-663-74	IC HY57V161610DTC-7TR			
IC505	8-759-663-74	IC HY57V161610DTC-7TR			
IC701	8-759-680-28	IC BA7666FS-E2			
IC801	8-759-825-34	IC CXD9626Q			
IC802	8-759-096-87	IC TC7WU04FU (TE12R)			
		< COIL >			
L701	1-412-788-41	INDUCTOR	10uH		
L711	1-412-790-31	INDUCTOR	15uH		
L713	1-412-790-31	INDUCTOR	15uH		
L715	1-412-790-31	INDUCTOR	15uH		
		< RESISTOR >			
R076	1-216-837-11	METAL CHIP	22K	5%	1/10W (TYPE A)
R077	1-216-815-11	METAL CHIP	330	5%	1/10W (TYPE A)
R077	1-216-833-11	METAL CHIP	10K	5%	1/10W (TYPE B)
R078	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R079	1-216-801-11	METAL CHIP	22	5%	1/10W (TYPE A)
R079	1-216-845-11	METAL CHIP	100K	5%	1/10W (TYPE B)
R101	1-216-789-11	METAL CHIP	2.2	5%	1/10W
R105	1-216-833-11	METAL CHIP	10K	5%	1/10W
R107	1-216-821-11	METAL CHIP	1K	5%	1/10W
R109	1-216-797-11	METAL CHIP	10	5%	1/10W
R111	1-216-817-11	METAL CHIP	470	5%	1/10W
R112	1-216-821-11	METAL CHIP	1K	5%	1/10W
R113	1-216-833-11	METAL CHIP	10K	5%	1/10W
R114	1-216-845-11	METAL CHIP	100K	5%	1/10W
R116	1-216-833-11	METAL CHIP	10K	5%	1/10W
R117	1-216-821-11	METAL CHIP	1K	5%	1/10W
R118	1-216-821-11	METAL CHIP	1K	5%	1/10W
R119	1-216-833-11	METAL CHIP	10K	5%	1/10W
R121	1-216-833-11	METAL CHIP	10K	5%	1/10W
R122	1-216-833-11	METAL CHIP	10K	5%	1/10W
R123	1-216-833-11	METAL CHIP	10K	5%	1/10W
R124	1-216-797-11	METAL CHIP	10	5%	1/10W
R125	1-216-797-11	METAL CHIP	10	5%	1/10W
R126	1-216-797-11	METAL CHIP	10	5%	1/10W
R128	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R129	1-216-833-11	METAL CHIP	10K	5%	1/10W
R130	1-216-833-11	METAL CHIP	10K	5%	1/10W
R131	1-216-833-11	METAL CHIP	10K	5%	1/10W
R132	1-216-833-11	METAL CHIP	10K	5%	1/10W
R133	1-216-833-11	METAL CHIP	10K	5%	1/10W
R134	1-216-833-11	METAL CHIP	10K	5%	1/10W
R136	1-216-797-11	METAL CHIP	10	5%	1/10W
R137	1-216-797-11	METAL CHIP	10	5%	1/10W
R138	1-216-797-11	METAL CHIP	10	5%	1/10W
R140	1-216-797-11	METAL CHIP	10	5%	1/10W
R141	1-216-797-11	METAL CHIP	10	5%	1/10W
R142	1-216-797-11	METAL CHIP	10	5%	1/10W
R143	1-216-833-11	METAL CHIP	10K	5%	1/10W
R145	1-216-833-11	METAL CHIP	10K	5%	1/10W
R146	1-216-833-11	METAL CHIP	10K	5%	1/10W
R148	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R150	1-216-827-11	METAL CHIP	3.3K	5%	1/10W (AUS)
R150	1-216-835-11	METAL CHIP	15K	5%	1/10W (AEP, UK)
R150	1-218-867-11	METAL CHIP	6.8K	5%	1/10W (SP)
R151	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R152	1-218-867-11	METAL CHIP	6.8K	5%	1/10W
R153	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R154	1-216-835-11	METAL CHIP	15K	5%	1/10W (AUS)
R154	1-216-839-11	METAL CHIP	33K	5%	1/10W (SP)
R154	1-216-843-11	METAL CHIP	68K	5%	1/10W (AEP, UK)
R155	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R156	1-216-833-11	METAL CHIP	10K	5%	1/10W
R157	1-216-864-11	SHORT CHIP	0		
R160	1-216-833-11	METAL CHIP	10K	5%	1/10W
R161	1-216-864-11	SHORT CHIP	0		
R162	1-216-833-11	METAL CHIP	10K	5%	1/10W
R163	1-216-833-11	METAL CHIP	10K	5%	1/10W
R164	1-216-809-11	METAL CHIP	100	5%	1/10W
R165	1-216-809-11	METAL CHIP	100	5%	1/10W
R166	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R167	1-216-821-11	METAL CHIP	1K	5%	1/10W
R168	1-216-821-11	METAL CHIP	1K	5%	1/10W
R170	1-216-821-11	METAL CHIP	1K	5%	1/10W
R172	1-216-833-11	METAL CHIP	10K	5%	1/10W
R174	1-216-797-11	METAL CHIP	10	5%	1/10W
R175	1-216-864-11	SHORT CHIP	0		
R177	1-216-797-11	METAL CHIP	10	5%	1/10W
R178	1-216-797-11	METAL CHIP	10	5%	1/10W
R179	1-216-833-11	METAL CHIP	10K	5%	1/10W
R182	1-216-845-11	METAL CHIP	100K	5%	1/10W
R183	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R185	1-216-833-11	METAL CHIP	10K	5%	1/10W
R186	1-216-833-11	METAL CHIP	10K	5%	1/10W
R199	1-216-826-11	METAL CHIP	2.7K	5%	1/10W
R299	1-216-847-11	METAL CHIP	150K	5%	1/10W
R301	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R302	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R305	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R306	1-216-829-11	METAL CHIP	4.7K	5%	1/10W

DVD (Suffix-21)

Ref. No.	Part No.	Description			Remark
R307	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R308	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R309	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R310	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R311	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R312	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R313	1-216-817-11	METAL CHIP	470	5%	1/10W
R314	1-216-817-11	METAL CHIP	470	5%	1/10W
R315	1-216-817-11	METAL CHIP	470	5%	1/10W
R316	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R317	1-216-833-11	METAL CHIP	10K	5%	1/10W
R318	1-216-864-11	METAL CHIP	0	5%	1/10W
R319	1-218-867-11	METAL CHIP	6.8K	5%	1/10W
R320	1-216-864-11	SHORT CHIP	0		
R321	1-216-817-11	METAL CHIP	470	5%	1/10W
R328	1-216-833-11	METAL CHIP	10K	5%	1/10W
R329	1-216-864-11	SHORT CHIP	0		
R330	1-216-864-11	SHORT CHIP	0		
R332	1-216-864-11	SHORT CHIP	0		
R334	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R335	1-218-855-11	METAL CHIP	2.2K	0.5%	1/10W
R336	1-216-833-11	METAL CHIP	10K	5%	1/10W
R337	1-216-809-11	METAL CHIP	100	5%	1/10W
R338	1-218-879-11	METAL CHIP	22K	0.5%	1/10W
R341	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R342	1-218-883-11	METAL CHIP	33K	0.5%	1/10W
R343	1-218-831-11	METAL CHIP	220	0.5%	1/10W
R344	1-218-847-11	METAL CHIP	1K	0.5%	1/10W
R345	1-216-833-11	METAL CHIP	10K	5%	1/10W
R349	1-216-838-11	METAL CHIP	27K	5%	1/10W
R350	1-216-822-11	METAL CHIP	1.2K	5%	1/10W
R351	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R352	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R356	1-218-853-11	METAL CHIP	1.8K	0.5%	1/10W
R368	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R384	1-216-797-11	METAL CHIP	10	5%	1/10W
R385	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R402	1-216-833-11	METAL CHIP	10K	5%	1/10W
R403	1-216-833-11	METAL CHIP	10K	5%	1/10W
R404	1-216-821-11	METAL CHIP	1K	5%	1/10W
R405	1-216-821-11	METAL CHIP	1K	5%	1/10W
R406	1-216-846-11	METAL CHIP	120K	5%	1/10W
R407	1-216-846-11	METAL CHIP	120K	5%	1/10W
R408	1-216-847-11	METAL CHIP	150K	5%	1/10W
R409	1-216-847-11	METAL CHIP	150K	5%	1/10W
R410	1-216-842-11	METAL CHIP	56K	5%	1/10W
R411	1-216-842-11	METAL CHIP	56K	5%	1/10W
R412	1-216-850-11	METAL CHIP	270K	5%	1/10W
R413	1-216-833-11	METAL CHIP	10K	5%	1/10W
R414	1-216-853-11	METAL CHIP	470K	5%	1/10W
R415	1-216-846-11	METAL CHIP	120K	5%	1/10W
R416	1-216-855-11	METAL CHIP	680K	5%	1/10W
R417	1-216-833-11	METAL CHIP	10K	5%	1/10W
R418	1-216-839-11	METAL CHIP	33K	5%	1/10W
R419	1-216-839-11	METAL CHIP	33K	5%	1/10W
R420	1-216-853-11	METAL CHIP	470K	5%	1/10W
R421	1-216-839-11	METAL CHIP	33K	5%	1/10W
R422	1-216-839-11	METAL CHIP	33K	5%	1/10W
R423	1-216-839-11	METAL CHIP	33K	5%	1/10W
R424	1-216-839-11	METAL CHIP	33K	5%	1/10W
R425	1-216-849-11	METAL CHIP	220K	5%	1/10W
R426	1-216-853-11	METAL CHIP	470K	5%	1/10W
R427	1-218-895-11	METAL CHIP	100K	0.5%	1/10W
R428	1-216-839-11	METAL CHIP	33K	5%	1/10W
R429	1-218-889-11	METAL CHIP	56K	0.5%	1/10W
R430	1-218-895-11	METAL CHIP	100K	0.5%	1/10W
R431	1-218-889-11	METAL CHIP	56K	0.5%	1/10W
R432	1-216-833-11	METAL CHIP	10K	5%	1/10W
R433	1-216-833-11	METAL CHIP	10K	5%	1/10W
R434	1-216-815-11	METAL CHIP	330	5%	1/10W
R435	1-216-833-11	METAL CHIP	10K	5%	1/10W
R436	1-216-809-11	METAL CHIP	100	5%	1/10W
R439	1-216-864-11	SHORT CHIP	0		
R507	1-216-809-11	METAL CHIP	100	5%	1/10W
R508	1-216-864-11	SHORT CHIP	0		
R509	1-216-864-11	SHORT CHIP	0		
R510	1-216-833-11	METAL CHIP	10K	5%	1/10W
R511	1-216-813-11	METAL CHIP	220	5%	1/10W
R512	1-216-813-11	METAL CHIP	220	5%	1/10W
R513	1-216-813-11	METAL CHIP	220	5%	1/10W
R514	1-216-813-11	METAL CHIP	220	5%	1/10W
R515	1-216-813-11	METAL CHIP	220	5%	1/10W
R516	1-216-813-11	METAL CHIP	220	5%	1/10W
R517	1-216-833-11	METAL CHIP	10K	5%	1/10W
R518	1-216-822-11	METAL CHIP	1.2K	5%	1/10W
R521	1-216-864-11	SHORT CHIP	0		
R522	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R524	1-216-833-11	METAL CHIP	10K	5%	1/10W
R525	1-216-833-11	METAL CHIP	10K	5%	1/10W
R532	1-216-833-11	METAL CHIP	10K	5%	1/10W
R533	1-216-797-11	METAL CHIP	10	5%	1/10W
R554	1-216-797-11	METAL CHIP	10	5%	1/10W
R701	1-216-833-11	METAL CHIP	10K	5%	1/10W
R711	1-218-289-11	METAL CHIP	510	5%	1/10W
R712	1-218-289-11	METAL CHIP	510	5%	1/10W
R713	1-218-289-11	METAL CHIP	510	5%	1/10W
R717	1-218-285-11	METAL CHIP	75	5%	1/10W
R718	1-218-285-11	METAL CHIP	75	5%	1/10W
R719	1-218-285-11	METAL CHIP	75	5%	1/10W
R724	1-216-833-11	METAL CHIP	10K	5%	1/10W
R725	1-216-833-11	METAL CHIP	10K	5%	1/10W
R737	1-216-864-11	SHORT CHIP	0		
R738	1-216-864-11	SHORT CHIP	0		
R802	1-216-864-11	SHORT CHIP	0		
R803	1-216-864-11	SHORT CHIP	0		
R805	1-216-809-11	METAL CHIP	100	5%	1/10W
R806	1-216-809-11	METAL CHIP	100	5%	1/10W
R807	1-216-809-11	METAL CHIP	100	5%	1/10W
R808	1-216-809-11	METAL CHIP	100	5%	1/10W
R812	1-216-864-11	SHORT CHIP	0		
R813	1-216-864-11	SHORT CHIP	0		
R814	1-216-864-11	SHORT CHIP	0		

DVD (Suffix-21) **DVD (Suffix-22)**

Ref. No.	Part No.	Description			Remark
		< VARIABLE RESISTOR >			
RV501	1-223-583-11	RES, ADJ, CARBON 1K			
		< VIBRATOR >			
X101	1-795-174-11	VIBRATOR, CERAMIC (16.5MHz)			
X102	1-767-519-11	VIBRATOR, CRYSTAL (27MHz)			
**********					
	A-4729-462-A	DVD BOARD, COMPLETE (AEP)			
	A-4729-463-A	DVD BOARD, COMPLETE (UK)			
	A-4729-464-A	DVD BOARD, COMPLETE (US, CND)			
	A-4729-465-A	DVD BOARD, COMPLETE (AUS)			
	A-4729-466-A	DVD BOARD, COMPLETE (SP)			
	A-4730-563-A	DVD BOARD, COMPLETE (CH)			
		**********			
		< CAPACITOR >			
C004	1-126-204-11	ELECT CHIP	47uF	20%	16V
C005	1-126-246-11	ELECT CHIP	220uF	20%	4V
C006	1-126-204-11	ELECT CHIP	47uF	20%	16V
C007	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
C018	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C019	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C103	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C104	1-126-209-11	ELECT CHIP	100uF	20%	4V
C105	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C106	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C107	1-162-915-11	CERAMIC CHIP	10PF	0.5PF	50V
C108	1-162-917-11	CERAMIC CHIP	15PF	5%	50V
C109	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C110	1-126-209-11	ELECT CHIP	100uF	20%	4V
C111	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C112	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C113	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C114	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C116	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C119	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C124	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C301	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C304	1-126-246-11	ELECT CHIP	220uF	20%	4V
C305	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C306	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C307	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C309	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C310	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C311	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C312	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C313	1-164-677-11	CERAMIC CHIP	0.033uF	10%	16V
C315	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C317	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C318	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C319	1-110-563-11	CERAMIC CHIP	0.068uF	10%	16V
C320	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C321	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C322	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C323	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C324	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V

Ref. No.	Part No.	Description			Remark
C325	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C326	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C327	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C328	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C331	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C332	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C333	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C334	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C335	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C336	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C337	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C338	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C339	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C340	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C341	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C342	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C343	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C344	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C345	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C346	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C347	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C348	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C349	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C350	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C351	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C352	1-126-204-11	ELECT CHIP	47uF	20%	16V
C401	1-164-245-11	CERAMIC CHIP	0.015uF	10%	25V
C402	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C403	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C404	1-162-965-11	CERAMIC CHIP	0.0015uF	10%	50V
C405	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C406	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C407	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C408	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C411	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C412	1-164-677-11	CERAMIC CHIP	0.033uF	10%	16V
C413	1-164-677-11	CERAMIC CHIP	0.033uF	10%	16V
C414	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C415	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C416	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C417	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C418	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C419	1-126-204-11	ELECT CHIP	47uF	20%	16V
C420	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C421	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C427	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C428	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C429	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C430	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C501	1-126-193-11	ELECT CHIP	1uF	20%	50V
C502	1-117-370-11	CERAMIC CHIP	10uF		10V
C503	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C504	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C505	1-117-370-11	CERAMIC CHIP	10uF		10V
C506	1-117-370-11	CERAMIC CHIP	10uF		10V
C508	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C509	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C510	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V

DVD (Suffix-22)

Ref. No.	Part No.	Description			Remark
C511	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C512	1-126-246-11	ELECT CHIP	220uF	20%	4V
C513	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C514	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C516	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C518	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C519	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C520	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C521	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C522	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C523	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C524	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C525	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C526	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C529	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C530	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C531	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C532	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C533	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C534	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C535	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C536	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C537	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C538	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C539	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C540	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C541	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C542	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C545	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C546	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C547	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C701	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C702	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C711	1-162-918-11	CERAMIC CHIP	18PF	5%	50V
C712	1-162-921-11	CERAMIC CHIP	33PF	5%	50V
C716	1-162-918-11	CERAMIC CHIP	18PF	5%	50V
C717	1-162-921-11	CERAMIC CHIP	33PF	5%	50V
C721	1-162-918-11	CERAMIC CHIP	18PF	5%	50V
C722	1-162-921-11	CERAMIC CHIP	33PF	5%	50V
C741	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C742	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C743	1-124-778-00	ELECT CHIP	22uF	20%	6.3V
C744	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C745	1-124-778-00	ELECT CHIP	22uF	20%	6.3V
C764	1-126-193-11	ELECT CHIP	1uF	20%	50V
C765	1-126-193-11	ELECT CHIP	1uF	20%	50V
C766	1-126-193-11	ELECT CHIP	1uF	20%	50V
C802	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C806	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C807	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C810	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C811	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
		< CONNECTOR >			
CN008	1-774-180-11	PIN, CONNECTOR (PC BOARD) 6P			
CN009	1-784-135-11	CONNECTOR, FFC/FPC 9P			
CN010	1-784-146-11	CONNECTOR, FFC/FPC 25P			
CN011	1-778-867-21	CONNECTOR, FFC/FPC 6P			

Ref. No.	Part No.	Description	Remark
CN101	1-784-862-21	CONNECTOR, FFC (LIF (NON-ZIF)) 10P	
* CN103	1-569-775-21	PIN, CONNECTOR (SMD) 5P	
* CN402	1-569-775-21	PIN, CONNECTOR (SMD) 5P	
* CN404	1-569-775-21	PIN, CONNECTOR (SMD) 5P	
CN801	1-784-365-21	CONNECTOR, FFC/FPC 5P	
		< FERRITE BEAD/SHORT >	
FB007	1-469-324-21	FERRITE 0uH	
FB008	1-469-324-21	FERRITE 0uH	
FB009	1-469-324-21	FERRITE 0uH	
FB010	1-469-324-21	FERRITE 0uH	
FB011	1-469-324-21	FERRITE 0uH	
FB012	1-469-324-21	FERRITE 0uH	
FB112	1-469-324-21	FERRITE 0uH	
FB113	1-216-295-00	SHORT CHIP 0	
FB114	1-216-295-00	SHORT CHIP 0	
FB711	1-216-295-00	SHORT CHIP 0	
FB712	1-216-295-00	SHORT CHIP 0	
FB714	1-216-295-00	SHORT CHIP 0	
FB801	1-216-295-00	SHORT CHIP 0	
FB802	1-216-295-00	SHORT CHIP 0	
FB803	1-216-295-00	SHORT CHIP 0	
		< FILTER >	
FL003	1-234-177-21	FILTER, CHIP EMI	
FL004	1-234-177-21	FILTER, CHIP EMI	
FL005	1-233-893-21	FILTER, CHIP EMI	
FL101	1-233-893-21	FILTER, CHIP EMI	
FL102	1-233-893-21	FILTER, CHIP EMI	
FL103	1-233-893-21	FILTER, CHIP EMI	
FL501	1-233-893-21	FILTER, CHIP EMI	
FL502	1-233-893-21	FILTER, CHIP EMI	
FL505	1-234-177-21	FILTER, CHIP EMI	
		< IC >	
IC006	6-700-398-01	IC uPC2918T-E1	
IC101	8-759-640-41	IC BR24C08F-E2	
IC102	8-759-831-81	IC IMIC6001BTD	
IC103	8-759-829-75	IC MB91307APFV-G-BND-E1	
IC108	6-802-147-01	IC MR27V3202F-8UTPZ020	
IC301	8-759-599-45	IC MM1385ENLE	
IC302	8-759-828-01	IC CXD9635R	
IC303	8-759-683-75	IC MSM51V8160F-60TSKR1	
IC401	6-701-878-01	IC FAN8034L	
IC501	8-759-832-30	IC TK71518ASCL	
IC502	8-759-599-45	IC MM1385ENLE	
IC503	8-752-409-87	IC CXD1933Q	
IC504	8-759-663-74	IC HY57V161610DTC-7TR	
IC505	8-759-663-74	IC HY57V161610DTC-7TR	
IC701	8-759-680-28	IC BA7666FS-E2	
IC801	8-759-825-34	IC CXD9626Q	
IC802	8-759-096-87	IC TC7WU04FU (TE12R)	
		< COIL >	
L701	1-412-788-41	INDUCTOR 10uH	
L711	1-412-790-31	INDUCTOR 15uH	
L713	1-412-790-31	INDUCTOR 15uH	
L715	1-412-790-31	INDUCTOR 15uH	

Ref. No.	Part No.	Description			Remark
		< RESISTOR >			
R076	1-216-837-11	METAL CHIP	22K	5%	1/10W (TYPE A)
R077	1-216-815-11	METAL CHIP	330	5%	1/10W (TYPE A)
R077	1-216-833-11	METAL CHIP	10K	5%	1/10W (TYPE B)
R078	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R079	1-216-801-11	METAL CHIP	22	5%	1/10W (TYPE A)
R079	1-216-845-11	METAL CHIP	100K	5%	1/10W (TYPE B)
R101	1-216-789-11	METAL CHIP	2.2	5%	1/10W
R105	1-216-833-11	METAL CHIP	10K	5%	1/10W
R107	1-216-821-11	METAL CHIP	1K	5%	1/10W
R109	1-216-797-11	METAL CHIP	10	5%	1/10W
R111	1-216-817-11	METAL CHIP	470	5%	1/10W
R112	1-216-821-11	METAL CHIP	1K	5%	1/10W
R113	1-216-833-11	METAL CHIP	10K	5%	1/10W
R114	1-216-845-11	METAL CHIP	100K	5%	1/10W
R116	1-216-833-11	METAL CHIP	10K	5%	1/10W
R117	1-216-821-11	METAL CHIP	1K	5%	1/10W
R118	1-216-821-11	METAL CHIP	1K	5%	1/10W
R119	1-216-833-11	METAL CHIP	10K	5%	1/10W
R121	1-216-833-11	METAL CHIP	10K	5%	1/10W
R122	1-216-833-11	METAL CHIP	10K	5%	1/10W
R123	1-216-833-11	METAL CHIP	10K	5%	1/10W
R124	1-216-797-11	METAL CHIP	10	5%	1/10W
R125	1-216-797-11	METAL CHIP	10	5%	1/10W
R126	1-216-797-11	METAL CHIP	10	5%	1/10W
R128	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R129	1-216-833-11	METAL CHIP	10K	5%	1/10W
R130	1-216-833-11	METAL CHIP	10K	5%	1/10W
R131	1-216-833-11	METAL CHIP	10K	5%	1/10W
R132	1-216-833-11	METAL CHIP	10K	5%	1/10W
R133	1-216-833-11	METAL CHIP	10K	5%	1/10W
R134	1-216-833-11	METAL CHIP	10K	5%	1/10W
R136	1-216-797-11	METAL CHIP	10	5%	1/10W
R137	1-216-797-11	METAL CHIP	10	5%	1/10W
R138	1-216-797-11	METAL CHIP	10	5%	1/10W
R140	1-216-797-11	METAL CHIP	10	5%	1/10W
R141	1-216-797-11	METAL CHIP	10	5%	1/10W
R142	1-216-797-11	METAL CHIP	10	5%	1/10W
R143	1-216-833-11	METAL CHIP	10K	5%	1/10W
R145	1-216-833-11	METAL CHIP	10K	5%	1/10W
R146	1-216-833-11	METAL CHIP	10K	5%	1/10W
R148	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R150	1-216-825-11	METAL CHIP	2.2K	5%	1/10W (CH)
R150	1-216-827-11	METAL CHIP	3.3K	5%	1/10W (AUS)
R150	1-216-835-11	METAL CHIP	15K	5%	1/10W (AEP, UK)
R150	1-218-867-11	METAL CHIP	6.8K	5%	1/10W (SP)
R151	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R152	1-218-867-11	METAL CHIP	6.8K	5%	1/10W
R153	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R154	1-216-835-11	METAL CHIP	15K	5%	1/10W (AUS)
R154	1-216-839-11	METAL CHIP	33K	5%	1/10W (SP)
R154	1-216-843-11	METAL CHIP	68K	5%	1/10W (AEP, UK)
R154	1-218-867-11	METAL CHIP	6.8K	0.5%	1/10W (CH)
R155	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R156	1-216-833-11	METAL CHIP	10K	5%	1/10W
R157	1-216-864-11	SHORT CHIP	0		
R160	1-216-833-11	METAL CHIP	10K	5%	1/10W
R161	1-216-864-11	SHORT CHIP	0		
R162	1-216-833-11	METAL CHIP	10K	5%	1/10W
R163	1-216-833-11	METAL CHIP	10K	5%	1/10W
R164	1-216-809-11	METAL CHIP	100	5%	1/10W
R165	1-216-809-11	METAL CHIP	100	5%	1/10W
R166	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R167	1-216-821-11	METAL CHIP	1K	5%	1/10W
R168	1-216-821-11	METAL CHIP	1K	5%	1/10W
R170	1-216-821-11	METAL CHIP	1K	5%	1/10W
R172	1-216-833-11	METAL CHIP	10K	5%	1/10W
R174	1-216-797-11	METAL CHIP	10	5%	1/10W
R175	1-216-864-11	SHORT CHIP	0		
R177	1-216-797-11	METAL CHIP	10	5%	1/10W
R178	1-216-797-11	METAL CHIP	10	5%	1/10W
R179	1-216-833-11	METAL CHIP	10K	5%	1/10W
R182	1-216-845-11	METAL CHIP	100K	5%	1/10W
R183	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R185	1-216-833-11	METAL CHIP	10K	5%	1/10W
R186	1-216-833-11	METAL CHIP	10K	5%	1/10W
R199	1-216-826-11	METAL CHIP	2.7K	5%	1/10W
R299	1-216-847-11	METAL CHIP	150K	5%	1/10W
R301	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R302	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R305	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R306	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R307	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R308	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R309	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R310	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R311	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R312	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R313	1-216-817-11	METAL CHIP	470	5%	1/10W
R314	1-216-817-11	METAL CHIP	470	5%	1/10W
R315	1-216-817-11	METAL CHIP	470	5%	1/10W
R316	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R317	1-216-833-11	METAL CHIP	10K	5%	1/10W
R318	1-216-864-11	METAL CHIP	0	5%	1/10W
R319	1-218-867-11	METAL CHIP	6.8K	5%	1/10W
R320	1-216-864-11	SHORT CHIP	0		
R321	1-216-817-11	METAL CHIP	470	5%	1/10W
R328	1-216-833-11	METAL CHIP	10K	5%	1/10W
R329	1-216-864-11	SHORT CHIP	0		
R330	1-216-864-11	SHORT CHIP	0		
R332	1-216-864-11	SHORT CHIP	0		
R334	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R335	1-218-855-11	METAL CHIP	2.2K	0.5%	1/10W

DVD (Suffix-22) JACK (Suffix-11)

Ref. No.	Part No.	Description			Remark
R336	1-216-833-11	METAL CHIP	10K	5%	1/10W
R337	1-216-809-11	METAL CHIP	100	5%	1/10W
R338	1-218-879-11	METAL CHIP	22K	0.5%	1/10W
R341	1-218-871-11	METAL CHIP	10K	0.5%	1/10W
R342	1-218-883-11	METAL CHIP	33K	0.5%	1/10W
R343	1-218-831-11	METAL CHIP	220	0.5%	1/10W
R344	1-218-847-11	METAL CHIP	1K	0.5%	1/10W
R345	1-216-833-11	METAL CHIP	10K	5%	1/10W
R349	1-216-838-11	METAL CHIP	27K	5%	1/10W
R350	1-216-822-11	METAL CHIP	1.2K	5%	1/10W
R351	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R352	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R356	1-218-853-11	METAL CHIP	1.8K	0.5%	1/10W
R368	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R384	1-216-797-11	METAL CHIP	10	5%	1/10W
R385	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R402	1-216-833-11	METAL CHIP	10K	5%	1/10W
R403	1-216-833-11	METAL CHIP	10K	5%	1/10W
R404	1-216-821-11	METAL CHIP	1K	5%	1/10W
R405	1-216-821-11	METAL CHIP	1K	5%	1/10W
R406	1-216-846-11	METAL CHIP	120K	5%	1/10W
R407	1-216-846-11	METAL CHIP	120K	5%	1/10W
R408	1-216-847-11	METAL CHIP	150K	5%	1/10W
R409	1-216-847-11	METAL CHIP	150K	5%	1/10W
R410	1-216-842-11	METAL CHIP	56K	5%	1/10W
R411	1-216-842-11	METAL CHIP	56K	5%	1/10W
R412	1-216-850-11	METAL CHIP	270K	5%	1/10W
R413	1-216-833-11	METAL CHIP	10K	5%	1/10W
R414	1-216-853-11	METAL CHIP	470K	5%	1/10W
R415	1-216-846-11	METAL CHIP	120K	5%	1/10W
R416	1-216-855-11	METAL CHIP	680K	5%	1/10W
R417	1-216-833-11	METAL CHIP	10K	5%	1/10W
R418	1-216-839-11	METAL CHIP	33K	5%	1/10W
R419	1-216-839-11	METAL CHIP	33K	5%	1/10W
R420	1-216-853-11	METAL CHIP	470K	5%	1/10W
R421	1-216-839-11	METAL CHIP	33K	5%	1/10W
R422	1-216-839-11	METAL CHIP	33K	5%	1/10W
R423	1-216-839-11	METAL CHIP	33K	5%	1/10W
R424	1-216-839-11	METAL CHIP	33K	5%	1/10W
R425	1-216-849-11	METAL CHIP	220K	5%	1/10W
R426	1-216-853-11	METAL CHIP	470K	5%	1/10W
R427	1-218-895-11	METAL CHIP	100K	0.5%	1/10W
R428	1-216-839-11	METAL CHIP	33K	5%	1/10W
R429	1-218-889-11	METAL CHIP	56K	0.5%	1/10W
R430	1-218-895-11	METAL CHIP	100K	0.5%	1/10W
R431	1-218-889-11	METAL CHIP	56K	0.5%	1/10W
R432	1-216-833-11	METAL CHIP	10K	5%	1/10W
R433	1-216-833-11	METAL CHIP	10K	5%	1/10W
R434	1-216-815-11	METAL CHIP	330	5%	1/10W
R435	1-216-833-11	METAL CHIP	10K	5%	1/10W
R436	1-216-809-11	METAL CHIP	100	5%	1/10W
R439	1-216-864-11	SHORT CHIP	0		
R507	1-216-809-11	METAL CHIP	100	5%	1/10W
R508	1-216-864-11	SHORT CHIP	0		
R509	1-216-864-11	SHORT CHIP	0		
R510	1-216-833-11	METAL CHIP	10K	5%	1/10W
R511	1-216-813-11	METAL CHIP	220	5%	1/10W
R512	1-216-813-11	METAL CHIP	220	5%	1/10W
R513	1-216-813-11	METAL CHIP	220	5%	1/10W
R514	1-216-813-11	METAL CHIP	220	5%	1/10W
R515	1-216-813-11	METAL CHIP	220	5%	1/10W
R516	1-216-813-11	METAL CHIP	220	5%	1/10W
R517	1-216-833-11	METAL CHIP	10K	5%	1/10W
R518	1-216-822-11	METAL CHIP	1.2K	5%	1/10W
R521	1-216-864-11	SHORT CHIP	0		
R522	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R524	1-216-833-11	METAL CHIP	10K	5%	1/10W
R525	1-216-833-11	METAL CHIP	10K	5%	1/10W
R532	1-216-833-11	METAL CHIP	10K	5%	1/10W
R533	1-216-797-11	METAL CHIP	10	5%	1/10W
R554	1-216-797-11	METAL CHIP	10	5%	1/10W
R701	1-216-833-11	METAL CHIP	10K	5%	1/10W
R711	1-218-289-11	METAL CHIP	510	5%	1/10W
R712	1-218-289-11	METAL CHIP	510	5%	1/10W
R713	1-218-289-11	METAL CHIP	510	5%	1/10W
R717	1-218-285-11	METAL CHIP	75	5%	1/10W
R718	1-218-285-11	METAL CHIP	75	5%	1/10W
R719	1-218-285-11	METAL CHIP	75	5%	1/10W
R724	1-216-833-11	METAL CHIP	10K	5%	1/10W
R725	1-216-833-11	METAL CHIP	10K	5%	1/10W
R737	1-216-864-11	SHORT CHIP	0		
R738	1-216-864-11	SHORT CHIP	0		
R802	1-216-864-11	SHORT CHIP	0		
R803	1-216-864-11	SHORT CHIP	0		
R805	1-216-809-11	METAL CHIP	100	5%	1/10W
R806	1-216-809-11	METAL CHIP	100	5%	1/10W
R807	1-216-809-11	METAL CHIP	100	5%	1/10W
R808	1-216-809-11	METAL CHIP	100	5%	1/10W
R812	1-216-864-11	SHORT CHIP	0		
R813	1-216-864-11	SHORT CHIP	0		
R814	1-216-864-11	SHORT CHIP	0		
		< VARIABLE RESISTOR >			
RV501	1-223-583-11	RES, ADJ, CARBON 1K			
		< VIBRATOR >			
X101	1-795-174-11	VIBRATOR, CERAMIC (16.5MHz)			
X102	1-767-519-11	VIBRATOR, CRYSTAL (27MHz)			
**********					
	1-685-428-11	JACK BOARD			
		**********			
		< CAPACITOR >			
C897	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C898	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
		< CONNECTOR >			
* CNP602	1-568-943-11	PIN, CONNECTOR 5P			
		< DIODE >			
D801	8-719-988-61	DIODE 1SS355TE-17			
D803	8-719-988-61	DIODE 1SS355TE-17			

JACK (Suffix-11)

Ref. No.	Part No.	Description			Remark
		< FERRITE BEAD >			
FB510	1-469-144-21	FERRITE	0uH		
FB511	1-469-144-21	FERRITE	0uH		
FB512	1-469-144-21	FERRITE	0uH		
		< JACK >			
J301	1-794-453-11	JACK (PHONES)			
		< SHORT >			
JR502	1-216-864-11	SHORT CHIP	0		
JR503	1-216-864-11	SHORT CHIP	0		
		< COIL >			
L101	1-412-006-31	INDUCTOR	10uH		
L201	1-412-006-31	INDUCTOR	10uH		
L202	1-412-002-31	INDUCTOR	4.7uH		
L203	1-412-002-31	INDUCTOR	4.7uH		
L204	1-412-002-31	INDUCTOR	4.7uH		
L205	1-412-002-31	INDUCTOR	4.7uH		
		< RESISTOR >			
R515	1-216-819-11	METAL CHIP	680	5%	1/10W
R887	1-216-821-11	METAL CHIP	1K	5%	1/10W
R890	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R891	1-216-821-11	METAL CHIP	1K	5%	1/10W
R893	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
		< SWITCH >			
S810	1-786-220-11	SWITCH, KEY BOARD (CD SYNCHRO)			
S814	1-786-220-11	SWITCH, KEY BOARD (DIRECTION)			
S816	1-786-220-11	SWITCH, KEY BOARD (REPEAT, FM MODE)			
S819	1-786-220-11	SWITCH, KEY BOARD (PLAY MODE, TUNING MODE)			
**********					
	1-685-428-12	JACK BOARD			
		**********			
		< CAPACITOR >			
C897	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
C898	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V
		< CONNECTOR >			
* CNP602	1-568-943-11	PIN, CONNECTOR 5P			
		< DIODE >			
D801	8-719-988-61	DIODE 1SS355TE-17			
D803	8-719-988-61	DIODE 1SS355TE-17			
		< FERRITE BEAD >			
FB510	1-469-144-21	FERRITE	0uH		
FB511	1-469-144-21	FERRITE	0uH		
FB512	1-469-144-21	FERRITE	0uH		
		< JACK >			
J301	1-794-453-11	JACK (PHONES)			

JACK (Suffix-12)

Ref. No.	Part No.	Description			Remark
		< SHORT >			
JR502	1-216-864-11	SHORT CHIP	0		
JR503	1-216-864-11	SHORT CHIP	0		
		< COIL >			
L101	1-412-006-31	INDUCTOR	10uH		
L201	1-412-006-31	INDUCTOR	10uH		
L202	1-412-002-31	INDUCTOR	4.7uH		
L203	1-412-002-31	INDUCTOR	4.7uH		
L204	1-412-002-31	INDUCTOR	4.7uH		
L205	1-412-002-31	INDUCTOR	4.7uH		
		< RESISTOR >			
R515	1-216-819-11	METAL CHIP	680	5%	1/10W
R887	1-216-821-11	METAL CHIP	1K	5%	1/10W
R890	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R891	1-216-821-11	METAL CHIP	1K	5%	1/10W
R893	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
		< SWITCH >			
S810	1-786-220-11	SWITCH, KEY BOARD (CD SYNCHRO)			
S814	1-786-220-11	SWITCH, KEY BOARD (DIRECTION)			
S816	1-786-220-11	SWITCH, KEY BOARD (REPEAT, FM MODE)			
S819	1-786-220-11	SWITCH, KEY BOARD (PLAY MODE, TUNING MODE)			
**********					
	1-676-599-11	LOADING BOARD			
		**********			
		< CONNECTOR >			
* CN1	1-568-943-11	PIN, CONNECTOR 5P			
		< SWITCH >			
S1	1-771-799-11	SWITCH, LEVER SLIDE (DISC TRAY OPEN/CLOSE DETECT)			
**********					
	A-4729-477-A	MAIN BOARD, COMPLETE (AEP, UK)			
	A-4729-478-A	MAIN BOARD, COMPLETE (US, CND)			
	A-4729-479-A	MAIN BOARD, COMPLETE (AUS)			
	A-4729-480-A	MAIN BOARD, COMPLETE (SP)			
		**********			
	4-217-354-11	BUSHING, INSULATING			
	4-230-078-01	SCREW, +BV TAPPING			
	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S			
	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S			
		< CAPACITOR >			
C101	1-126-963-11	ELECT	4.7uF	20%	50V
C102	1-126-963-11	ELECT	4.7uF	20%	50V
C103	1-126-163-11	ELECT	4.7uF	20%	50V
C104	1-126-963-11	ELECT	4.7uF	20%	50V
C106	1-126-163-11	ELECT	4.7uF	20%	50V
C107	1-162-965-11	CERAMIC CHIP	0.0015uF	5%	50V
C108	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C109	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V
C110	1-126-963-11	ELECT	4.7uF	20%	50V
C111	1-115-156-11	CERAMIC CHIP	1uF		10V

LOADING

MAIN (Suffix-14)

MAIN (Suffix-14)

Ref. No.	Part No.	Description			Remark
C114	1-126-963-11	ELECT	4.7uF	20%	50V
C115	1-126-163-11	ELECT	4.7uF	20%	50V
C130	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C131	1-124-259-11	ELECT	4.7uF	20%	16V
C141	1-126-967-11	ELECT	47uF	20%	50V
C142	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C143	1-126-965-11	ELECT	22uF	20%	50V
C144	1-130-495-00	MYLAR	0.1uF	5%	50V
C145	1-130-495-00	MYLAR	0.1uF	5%	50V
C150	1-124-259-11	ELECT	4.7uF	20%	16V
C160	1-124-261-00	ELECT	10uF	20%	50V
C163	1-124-259-11	ELECT	4.7uF	20%	16V
C170	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V (SP)
C170	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V (EXCEPT SP)
C201	1-126-963-11	ELECT	4.7uF	20%	50V
C202	1-126-963-11	ELECT	4.7uF	20%	50V
C203	1-126-963-11	ELECT	4.7uF	20%	50V
C204	1-126-963-11	ELECT	4.7uF	20%	50V
C206	1-126-963-11	ELECT	4.7uF	20%	50V
C207	1-162-965-11	CERAMIC CHIP	0.0015uF	5%	50V
C208	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C209	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V
C210	1-126-963-11	ELECT	4.7uF	20%	50V
C211	1-115-156-11	CERAMIC CHIP	1uF		10V
C214	1-126-963-11	ELECT	4.7uF	20%	50V
C215	1-126-163-11	ELECT	4.7uF	20%	50V
C230	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C231	1-124-259-11	ELECT	4.7uF	20%	16V
C241	1-126-967-11	ELECT	47uF	20%	50V
C242	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C243	1-126-965-11	ELECT	22uF	20%	50V
C244	1-130-495-00	MYLAR	0.1uF	5%	50V
C245	1-130-495-00	MYLAR	0.1uF	5%	50V
C250	1-124-259-11	ELECT	4.7uF	20%	16V
C260	1-124-261-00	ELECT	10uF	20%	50V
C263	1-124-259-11	ELECT	4.7uF	20%	16V
C270	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V (SP)
C270	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V (EXCEPT SP)
C301	1-126-964-11	ELECT	10uF	20%	50V
C302	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C304	1-119-774-11	ELECT	100uF	20%	16V
C306	1-126-967-11	ELECT	47uF	20%	50V
C307	1-126-933-11	ELECT	100uF	20%	16V
C308	1-128-549-11	ELECT	3300uF	20%	35V
C309	1-128-549-11	ELECT	3300uF	20%	35V
C310	1-126-944-11	ELECT	3300uF	20%	25V
C312	1-126-176-11	ELECT	220uF	20%	10V
C313	1-104-665-11	ELECT	100uF	20%	10V
C315	1-104-665-11	ELECT	100uF	20%	10V
C316	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C317	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C318	1-126-964-11	ELECT	10uF	20%	50V
C319	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C320	1-126-176-11	ELECT	220uF	20%	10V
C321	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C322	1-126-935-11	ELECT	470uF	20%	16V
C323	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C324	1-126-935-11	ELECT	470uF	20%	16V
C326	1-124-261-00	ELECT	10uF	20%	50V
C327	1-126-935-11	ELECT	470uF	20%	16V
C331	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C334	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C335	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C339	1-126-934-11	ELECT	220uF	20%	16V
C346	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C347	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C348	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C350	1-126-963-11	ELECT	4.7uF	20%	50V
C351	1-126-963-11	ELECT	4.7uF	20%	50V
C360	1-126-947-11	ELECT	47uF	20%	16V
C369	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C370	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C371	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C372	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C376	1-119-774-11	ELECT	100uF	20%	16V
C380	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V (AEP, UK)
C381	1-162-961-11	CERAMIC CHIP	330PF	10%	50V (AEP, UK)
C382	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V (AEP, UK)
C383	1-162-924-11	CERAMIC CHIP	56PF	5%	50V (AEP, UK)
C384	1-164-380-11	CERAMIC CHIP	51PF	5%	50V (AEP, UK)
C385	1-126-947-11	ELECT	47uF	20%	16V (AEP, UK)
C386	1-164-739-11	CERAMIC CHIP	560PF	5%	50V (AEP, UK)
C387	1-126-963-11	ELECT	4.7uF	20%	50V (AEP, UK)
		< CONNECTOR >			
CN301	1-784-739-11	CONNECTOR, FFC 17P			
CN302	1-784-786-11	CONNECTOR, FFC 25P			
CN303	1-784-778-11	CONNECTOR, FFC 17P			
* CN304	1-568-943-11	PIN, CONNECTOR 5P			
		< DIODE >			
D302	8-719-200-82	DIODE 11ES2-TA1B			
D305	8-719-110-17	DIODE MTZJ-T-77-10B			
D309	8-719-110-03	DIODE MTZJ-T-77-7.5C			
D310	8-719-983-15	DIODE MTZJ-T-77-3.9A			
D311	8-719-110-31	DIODE MTZJ-T-77-12B			
D312	8-719-991-33	DIODE 1SS133T-77			
D313	8-719-991-33	DIODE 1SS133T-77			
D315	8-719-991-33	DIODE 1SS133T-77			
D316	8-719-991-33	DIODE 1SS133T-77			
D317	8-719-998-61	DIODE 1SS355TE-17			
D320	8-719-982-11	DIODE MTZ-4.3B (AEP, UK)			

MAIN (Suffix-14)

Ref. No.	Part No.	Description			Remark
		< IC >			
IC101	8-759-584-38	IC TDA7296			
IC201	8-759-584-38	IC TDA7296			
IC304	8-759-646-54	IC KIA7808API			
IC323	8-759-669-03	IC LC75342			
IC324	8-759-359-49	IC NJM3414AV (TE2)			
IC326	8-759-557-36	IC BU1924F-E2 (AEP, UK)			
		< SHORT >			
JR101	1-216-864-11	SHORT CHIP	0		
JR201	1-216-864-11	SHORT CHIP	0		
JR301	1-216-864-11	SHORT CHIP	0		
JR302	1-216-864-11	SHORT CHIP	0		
JR303	1-216-864-11	SHORT CHIP	0		
JR304	1-216-864-11	SHORT CHIP	0		
JR306	1-216-864-11	SHORT CHIP	0		
JR307	1-216-864-11	SHORT CHIP	0		
JR308	1-216-864-11	SHORT CHIP	0		
JR309	1-216-864-11	SHORT CHIP	0		
JR311	1-216-864-11	SHORT CHIP	0		
JR312	1-216-864-11	SHORT CHIP	0		
JR313	1-216-864-11	SHORT CHIP	0 (US, CND, SP, AUS)		
		< COIL >			
JW302	1-410-515-11	INDUCTOR	33uH		
L101	1-422-009-13	COIL, AIR-CORE			
L201	1-422-009-13	COIL, AIR-CORE			
L304	1-412-002-31	INDUCTOR	4.7uH		
		< TRANSISTOR >			
Q100	8-729-920-31	TRANSISTOR	DTC343TK		
Q200	8-729-920-31	TRANSISTOR	DTC343TK		
Q301	8-729-028-54	TRANSISTOR	KTC3205-Y-AT		
Q302	8-729-901-81	TRANSISTOR	2SC2412K-T-146-R		(AEP, UK)
Q303	8-729-055-91	TRANSISTOR	SRA2202SF		
Q304	8-729-055-94	TRANSISTOR	SRC1202SF		
Q309	8-729-056-23	TRANSISTOR	STC352-OY		
Q310	8-729-036-89	TRANSISTOR	KTC3198GR-A		
Q311	8-729-036-89	TRANSISTOR	KTC3198GR-A		
Q312	8-729-055-91	TRANSISTOR	SRA2202SF		
Q313	8-729-055-94	TRANSISTOR	SRC1202SF		
Q330	8-729-055-94	TRANSISTOR	SRC1202SF		
Q341	8-729-202-56	TRANSISTOR	2SA950-Y		
Q342	8-729-202-56	TRANSISTOR	2SA950-Y		
Q343	8-729-055-94	TRANSISTOR	SRC1202SF		
Q344	8-729-055-94	TRANSISTOR	SRC1202SF		
Q355	8-729-019-00	TRANSISTOR	2SD2394-D		
Q406	8-729-920-31	TRANSISTOR	DTC343TK		
Q407	8-729-920-31	TRANSISTOR	DTC343TK		
Q408	8-729-920-31	TRANSISTOR	DTC343TK		
Q409	8-729-920-31	TRANSISTOR	DTC343TK		
		< RESISTOR >			
R101	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R102	1-216-821-11	METAL CHIP	1K	5%	1/10W
R103	1-216-833-11	METAL CHIP	10K	5%	1/10W
R104	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R105	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R106	1-216-821-11	METAL CHIP	1K	5%	1/10W
R107	1-218-867-11	METAL CHIP	6.8K	5%	1/10W
R108	1-249-437-11	CARBON	47K	5%	1/4W
R113	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R114	1-216-841-11	METAL CHIP	47K	5%	1/10W
R115	1-216-864-11	SHORT CHIP	0		
R118	1-216-821-11	METAL CHIP	1K	5%	1/10W
R120	1-216-849-11	METAL CHIP	220K	5%	1/10W
R121	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R122	1-216-833-11	METAL CHIP	10K	5%	1/10W
R123	1-216-833-11	METAL CHIP	10K	5%	1/10W
R130	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R131	1-216-841-11	METAL CHIP	47K	5%	1/10W
R140	1-216-819-11	METAL CHIP	680	5%	1/10W
R141	1-216-837-11	METAL CHIP	22K	5%	1/10W
R142	1-216-839-11	METAL CHIP	33K	5%	1/10W
R143	1-216-845-11	METAL CHIP	100K	5%	1/10W
R144	1-249-389-11	CARBON	4.7	5%	1/4W
R160	1-216-805-11	METAL CHIP	47	5%	1/10W
R161	1-216-805-11	METAL CHIP	47	5%	1/10W
R180	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R201	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R202	1-216-821-11	METAL CHIP	1K	5%	1/10W
R203	1-216-833-11	METAL CHIP	10K	5%	1/10W
R204	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R205	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R206	1-216-821-11	METAL CHIP	1K	5%	1/10W
R207	1-218-867-11	METAL CHIP	6.8K	5%	1/10W
R208	1-249-439-11	CARBON	68K	5%	1/4W
R213	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R214	1-216-841-11	METAL CHIP	47K	5%	1/10W
R215	1-216-864-11	SHORT CHIP	0		
R218	1-216-821-11	METAL CHIP	1K	5%	1/10W
R220	1-216-849-11	METAL CHIP	220K	5%	1/10W
R221	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R222	1-216-833-11	METAL CHIP	10K	5%	1/10W
R230	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R231	1-216-841-11	METAL CHIP	47K	5%	1/10W
R240	1-216-819-11	METAL CHIP	680	5%	1/10W
R241	1-216-837-11	METAL CHIP	22K	5%	1/10W
R242	1-216-839-11	METAL CHIP	33K	5%	1/10W
R243	1-216-845-11	METAL CHIP	100K	5%	1/10W
R244	1-249-389-11	CARBON	4.7	5%	1/4W
R260	1-216-805-11	METAL CHIP	47	5%	1/10W
R261	1-216-805-11	METAL CHIP	47	5%	1/10W
R280	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R302	1-216-845-11	METAL CHIP	100K	5%	1/10W
R304	1-216-809-11	METAL CHIP	100	5%	1/10W
R305	1-216-809-11	METAL CHIP	100	5%	1/10W
R307	1-216-833-11	METAL CHIP	10K	5%	1/10W
R308	1-216-845-11	METAL CHIP	100K	5%	1/10W
R309	1-216-821-11	METAL CHIP	1K	5%	1/10W
R310	1-216-809-11	METAL CHIP	100	5%	1/10W
R311	1-216-805-11	METAL CHIP	47	5%	1/10W
R313	1-216-841-11	METAL CHIP	47K	5%	1/10W

MAIN (Suffix-14)

Ref. No.	Part No.	Description			Remark
R317	1-216-841-11	METAL CHIP	47K	5%	1/10W (AEP, UK)
R318	1-216-841-11	METAL CHIP	47K	5%	1/10W (AEP, UK)
R320	1-216-851-11	METAL CHIP	330K	5%	1/10W
R323	1-216-833-11	METAL CHIP	10K	5%	1/10W
R330	1-216-821-11	METAL CHIP	1K	5%	1/10W
R331	1-216-833-11	METAL CHIP	10K	5%	1/10W
R339	1-216-841-11	METAL CHIP	47K	5%	1/10W
R340	1-247-807-31	CARBON	100	5%	1/4W
R341	1-216-817-11	METAL CHIP	470	5%	1/10W
R350	1-249-425-11	CARBON	4.7K	5%	1/4W
R364	1-216-805-11	METAL CHIP	47	5%	1/10W
R371	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (AEP, UK)
R372	1-216-853-11	METAL CHIP	470K	5%	1/10W (AEP, UK)
R373	1-216-821-11	METAL CHIP	1K	5%	1/10W (AEP, UK)
R374	1-216-845-11	METAL CHIP	100K	5%	1/10W (AEP, UK)
R375	1-216-841-11	METAL CHIP	47K	5%	1/10W (AEP, UK)
R376	1-216-843-11	METAL CHIP	68K	5%	1/10W (AEP, UK)
R377	1-216-817-11	METAL CHIP	470	5%	1/10W (AEP, UK)
R383	1-216-864-11	SHORT CHIP	0		
		< TERMINAL/JACK >			
SJ301	1-816-048-11	TERMINAL BOARD (SPEAKER)			
SJ302	1-815-045-11	JACK, PIN 2P (AUDIO IN MD (VIDEO))			
		< TERMINAL >			
TH1	1-537-770-21	TERMINAL BOARD, GROUND			
TH2	1-537-770-21	TERMINAL BOARD, GROUND			
		< TUNER UNIT >			
TU1	A-4303-953-A	TUNER UNIT (TCB023//K (CE)) (AEP, UK, AUS)			
TU1	A-4303-954-A	TUNER UNIT (TCB023//K (UC)) (US, CND, SP)			
		< VIBRATOR >			
X301	1-579-900-21	VIBRATOR, CRYSTAL (4.332MHz) (AEP, UK)			

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MAIN (Suffix-16)

	A-4729-477-A	MAIN BOARD, COMPLETE (AEP, UK)			
	A-4729-478-A	MAIN BOARD, COMPLETE (US, CND)			
	A-4729-479-A	MAIN BOARD, COMPLETE (AUS)			
	A-4729-480-A	MAIN BOARD, COMPLETE (SP)			
	A-4730-567-A	MAIN BOARD, COMPLETE (CH)			
		**********			
	4-217-354-11	BUSHING, INSULATING			
	4-230-078-01	SCREW, +BV TAPPING			
	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S			
	7-685-647-79	SCREW +BVTP 3X10 TYPE2 N-S			
		< CAPACITOR >			
C101	1-126-963-11	ELECT	4.7uF	20%	50V
C102	1-126-963-11	ELECT	4.7uF	20%	50V
C103	1-126-163-11	ELECT	4.7uF	20%	50V
C104	1-126-963-11	ELECT	4.7uF	20%	50V
C106	1-126-163-11	ELECT	4.7uF	20%	50V
C107	1-162-965-11	CERAMIC CHIP	0.0015uF	5%	50V
C108	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C109	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V
C110	1-126-963-11	ELECT	4.7uF	20%	50V
C111	1-115-156-11	CERAMIC CHIP	1uF		10V
C114	1-126-963-11	ELECT	4.7uF	20%	50V
C115	1-126-163-11	ELECT	4.7uF	20%	50V
C130	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C131	1-124-259-11	ELECT	4.7uF	20%	16V
C141	1-126-967-11	ELECT	47uF	20%	50V
C142	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C143	1-126-965-11	ELECT	22uF	20%	50V
C144	1-130-495-00	MYLAR	0.1uF	5%	50V
C145	1-130-495-00	MYLAR	0.1uF	5%	50V
C150	1-124-259-11	ELECT	4.7uF	20%	16V
C160	1-124-261-00	ELECT	10uF	20%	50V
C163	1-124-259-11	ELECT	4.7uF	20%	16V
C170	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V (SP)
C170	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V (EXCEPT SP)
C201	1-126-963-11	ELECT	4.7uF	20%	50V
C202	1-126-963-11	ELECT	4.7uF	20%	50V
C203	1-126-963-11	ELECT	4.7uF	20%	50V
C204	1-126-963-11	ELECT	4.7uF	20%	50V
C206	1-126-963-11	ELECT	4.7uF	20%	50V
C207	1-162-965-11	CERAMIC CHIP	0.0015uF	5%	50V
C208	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C209	1-115-467-11	CERAMIC CHIP	0.22uF	10%	10V
C210	1-126-963-11	ELECT	4.7uF	20%	50V
C211	1-115-156-11	CERAMIC CHIP	1uF		10V
C214	1-126-963-11	ELECT	4.7uF	20%	50V
C215	1-126-163-11	ELECT	4.7uF	20%	50V
C230	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C231	1-124-259-11	ELECT	4.7uF	20%	16V
C241	1-126-967-11	ELECT	47uF	20%	50V
C242	1-162-962-11	CERAMIC CHIP	470PF	10%	50V
C243	1-126-965-11	ELECT	22uF	20%	50V
C244	1-130-495-00	MYLAR	0.1uF	5%	50V
C245	1-130-495-00	MYLAR	0.1uF	5%	50V
C250	1-124-259-11	ELECT	4.7uF	20%	16V
C260	1-124-261-00	ELECT	10uF	20%	50V
C263	1-124-259-11	ELECT	4.7uF	20%	16V
C270	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V (SP)
C270	1-164-227-11	CERAMIC CHIP	0.022uF	10%	25V (EXCEPT SP)
C301	1-126-964-11	ELECT	10uF	20%	50V
C302	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C304	1-119-774-11	ELECT	100uF	20%	16V
C306	1-126-967-11	ELECT	47uF	20%	50V
C307	1-126-933-11	ELECT	100uF	20%	16V
C308	1-126-953-11	ELECT	2200uF	20%	35V
C309	1-126-953-11	ELECT	2200uF	20%	35V
C310	1-126-944-11	ELECT	3300uF	20%	25V
C312	1-126-176-11	ELECT	220uF	20%	10V

MAIN (Suffix-16)

Ref. No.	Part No.	Description			Remark
C313	1-104-665-11	ELECT	100uF	20%	10V
C315	1-104-665-11	ELECT	100uF	20%	10V
C316	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C317	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C318	1-126-964-11	ELECT	10uF	20%	50V
C319	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C320	1-126-176-11	ELECT	220uF	20%	10V
C321	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C322	1-126-935-11	ELECT	470uF	20%	16V
C323	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C324	1-126-935-11	ELECT	470uF	20%	16V
C326	1-124-261-00	ELECT	10uF	20%	50V
C327	1-126-935-11	ELECT	470uF	20%	16V
C331	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C334	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C335	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C339	1-126-934-11	ELECT	220uF	20%	16V
C346	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C347	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C348	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C350	1-126-963-11	ELECT	4.7uF	20%	50V
C351	1-126-963-11	ELECT	4.7uF	20%	50V
C360	1-126-947-11	ELECT	47uF	20%	16V
C369	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C370	1-162-960-11	CERAMIC CHIP	220PF	10%	50V
C371	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C372	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C376	1-119-774-11	ELECT	100uF	20%	16V
C380	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V (AEP, UK)
C381	1-162-961-11	CERAMIC CHIP	330PF	10%	50V (AEP, UK)
C382	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V (AEP, UK)
C383	1-162-924-11	CERAMIC CHIP	56PF	5%	50V (AEP, UK)
C384	1-164-380-11	CERAMIC CHIP	51PF	5%	50V (AEP, UK)
C385	1-126-947-11	ELECT	47uF	20%	16V (AEP, UK)
C386	1-164-739-11	CERAMIC CHIP	560PF	5%	50V (AEP, UK)
C387	1-126-963-11	ELECT	4.7uF	20%	50V (AEP, UK)
		< CONNECTOR >			
CN301	1-784-739-11	CONNECTOR, FFC 17P			
CN302	1-784-786-11	CONNECTOR, FFC 25P			
CN303	1-784-778-11	CONNECTOR, FFC 17P			
* CN304	1-568-943-11	PIN, CONNECTOR 5P			
		< DIODE >			
D302	8-719-200-82	DIODE 11ES2-TA1B			
D305	8-719-110-17	DIODE MTZJ-T-77-10B			
D309	8-719-110-03	DIODE MTZJ-T-77-7.5C			
D310	8-719-983-15	DIODE MTZJ-T-77-3.9A			
D311	8-719-110-31	DIODE MTZJ-T-77-12B			
D312	8-719-991-33	DIODE 1SS133T-77			
D313	8-719-991-33	DIODE 1SS133T-77			

Ref. No.	Part No.	Description	Remark
D315	8-719-991-33	DIODE 1SS133T-77	
D316	8-719-991-33	DIODE 1SS133T-77	
D317	8-719-998-61	DIODE 1SS355TE-17	
D320	8-719-982-11	DIODE MTZ-4.3B (AEP, UK)	
		< IC >	
IC101	8-759-584-38	IC TDA7296	
IC201	8-759-584-38	IC TDA7296	
IC304	8-759-646-54	IC KIA7808API	
IC323	8-759-669-03	IC LC75342	
IC324	8-759-359-49	IC NJM3414AV (TE2)	
IC326	8-759-557-36	IC BU1924F-E2 (AEP, UK)	
		< SHORT >	
JR101	1-216-864-11	SHORT CHIP 0	
JR201	1-216-864-11	SHORT CHIP 0	
JR301	1-216-864-11	SHORT CHIP 0	
JR302	1-216-864-11	SHORT CHIP 0	
JR303	1-216-864-11	SHORT CHIP 0	
JR304	1-216-864-11	SHORT CHIP 0	
JR306	1-216-864-11	SHORT CHIP 0	
JR307	1-216-864-11	SHORT CHIP 0	
JR308	1-216-864-11	SHORT CHIP 0	
JR309	1-216-864-11	SHORT CHIP 0	
JR311	1-216-864-11	SHORT CHIP 0	
JR312	1-216-864-11	SHORT CHIP 0	
JR313	1-216-864-11	SHORT CHIP 0 (US, CND, SP, AUS, CH)	
		< COIL >	
JW302	1-410-515-11	INDUCTOR 33uH	
L101	1-422-009-13	COIL, AIR-CORE	
L201	1-422-009-13	COIL, AIR-CORE	
L304	1-412-002-31	INDUCTOR 4.7uH	
		< TRANSISTOR >	
Q100	8-729-920-31	TRANSISTOR DTC343TK	
Q200	8-729-920-31	TRANSISTOR DTC343TK	
Q301	8-729-028-54	TRANSISTOR KTC3205-Y-AT	
Q302	8-729-901-81	TRANSISTOR 2SC2412K-T-146-R	(AEP, UK)
Q303	8-729-055-91	TRANSISTOR SRA2202SF	
Q304	8-729-055-94	TRANSISTOR SRC1202SF	
Q309	8-729-056-23	TRANSISTOR STC352-OY	
Q310	8-729-036-89	TRANSISTOR KTC3198GR-A	
Q311	8-729-036-89	TRANSISTOR KTC3198GR-A	
Q312	8-729-055-91	TRANSISTOR SRA2202SF	
Q313	8-729-055-94	TRANSISTOR SRC1202SF	
Q330	8-729-055-94	TRANSISTOR SRC1202SF	
Q341	8-729-202-56	TRANSISTOR 2SA950-Y	
Q342	8-729-202-56	TRANSISTOR 2SA950-Y	
Q343	8-729-055-94	TRANSISTOR SRC1202SF	
Q344	8-729-055-94	TRANSISTOR SRC1202SF	
Q355	8-729-019-00	TRANSISTOR 2SD2394-D	
Q406	8-729-920-31	TRANSISTOR DTC343TK	
Q407	8-729-920-31	TRANSISTOR DTC343TK	
Q408	8-729-920-31	TRANSISTOR DTC343TK	
Q409	8-729-920-31	TRANSISTOR DTC343TK	

MAIN (Suffix-16)

Ref. No.	Part No.	Description			Remark
		< RESISTOR >			
R101	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R102	1-216-821-11	METAL CHIP	1K	5%	1/10W
R103	1-216-833-11	METAL CHIP	10K	5%	1/10W
R104	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R105	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R106	1-216-821-11	METAL CHIP	1K	5%	1/10W
R107	1-218-867-11	METAL CHIP	6.8K	5%	1/10W
R108	1-249-437-11	CARBON	47K	5%	1/4W
R113	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R114	1-216-841-11	METAL CHIP	47K	5%	1/10W
R115	1-216-864-11	SHORT CHIP	0		
R118	1-216-821-11	METAL CHIP	1K	5%	1/10W
R120	1-216-849-11	METAL CHIP	220K	5%	1/10W
R121	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R122	1-216-833-11	METAL CHIP	10K	5%	1/10W
R123	1-216-833-11	METAL CHIP	10K	5%	1/10W
R130	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R131	1-216-841-11	METAL CHIP	47K	5%	1/10W
R140	1-216-819-11	METAL CHIP	680	5%	1/10W
R141	1-216-837-11	METAL CHIP	22K	5%	1/10W
R142	1-216-839-11	METAL CHIP	33K	5%	1/10W
R143	1-216-845-11	METAL CHIP	100K	5%	1/10W
R144	1-249-389-11	CARBON	4.7	5%	1/4W
R160	1-216-805-11	METAL CHIP	47	5%	1/10W
R161	1-216-805-11	METAL CHIP	47	5%	1/10W
R180	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R201	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R202	1-216-821-11	METAL CHIP	1K	5%	1/10W
R203	1-216-833-11	METAL CHIP	10K	5%	1/10W
R204	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R205	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R206	1-216-821-11	METAL CHIP	1K	5%	1/10W
R207	1-218-867-11	METAL CHIP	6.8K	5%	1/10W
R208	1-249-439-11	CARBON	68K	5%	1/4W
R213	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R214	1-216-841-11	METAL CHIP	47K	5%	1/10W
R215	1-216-864-11	SHORT CHIP	0		
R218	1-216-821-11	METAL CHIP	1K	5%	1/10W
R220	1-216-849-11	METAL CHIP	220K	5%	1/10W
R221	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R222	1-216-833-11	METAL CHIP	10K	5%	1/10W
R230	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R231	1-216-841-11	METAL CHIP	47K	5%	1/10W
R240	1-216-819-11	METAL CHIP	680	5%	1/10W
R241	1-216-837-11	METAL CHIP	22K	5%	1/10W
R242	1-216-839-11	METAL CHIP	33K	5%	1/10W
R243	1-216-845-11	METAL CHIP	100K	5%	1/10W
R244	1-249-389-11	CARBON	4.7	5%	1/4W
R260	1-216-805-11	METAL CHIP	47	5%	1/10W
R261	1-216-805-11	METAL CHIP	47	5%	1/10W
R280	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R302	1-216-845-11	METAL CHIP	100K	5%	1/10W
R304	1-216-809-11	METAL CHIP	100	5%	1/10W
R305	1-216-809-11	METAL CHIP	100	5%	1/10W
R307	1-216-833-11	METAL CHIP	10K	5%	1/10W
R308	1-216-845-11	METAL CHIP	100K	5%	1/10W
R309	1-216-821-11	METAL CHIP	1K	5%	1/10W
R310	1-216-809-11	METAL CHIP	100	5%	1/10W
R311	1-216-805-11	METAL CHIP	47	5%	1/10W
R313	1-216-841-11	METAL CHIP	47K	5%	1/10W
R317	1-216-841-11	METAL CHIP	47K	5%	1/10W (AEP, UK)
R318	1-216-841-11	METAL CHIP	47K	5%	1/10W (AEP, UK)
R320	1-216-851-11	METAL CHIP	330K	5%	1/10W
R323	1-216-833-11	METAL CHIP	10K	5%	1/10W
R330	1-216-821-11	METAL CHIP	1K	5%	1/10W
R331	1-216-833-11	METAL CHIP	10K	5%	1/10W
R339	1-216-841-11	METAL CHIP	47K	5%	1/10W
R340	1-247-807-31	CARBON	100	5%	1/4W
R341	1-216-817-11	METAL CHIP	470	5%	1/10W
R350	1-249-425-11	CARBON	4.7K	5%	1/4W
R364	1-216-805-11	METAL CHIP	47	5%	1/10W
R371	1-216-829-11	METAL CHIP	4.7K	5%	1/10W (AEP, UK)
R372	1-216-853-11	METAL CHIP	470K	5%	1/10W (AEP, UK)
R373	1-216-821-11	METAL CHIP	1K	5%	1/10W (AEP, UK)
R374	1-216-845-11	METAL CHIP	100K	5%	1/10W (AEP, UK)
R375	1-216-841-11	METAL CHIP	47K	5%	1/10W (AEP, UK)
R376	1-216-843-11	METAL CHIP	68K	5%	1/10W (AEP, UK)
R377	1-216-817-11	METAL CHIP	470	5%	1/10W (AEP, UK)
R383	1-216-864-11	SHORT CHIP	0		
		< TERMINAL/JACK >			
SJ301	1-816-048-11	TERMINAL BOARD (SPEAKER)			
SJ302	1-815-045-11	JACK, PIN 2P (AUDIO IN MD (VIDEO))			
		< TERMINAL >			
TH1	1-537-770-21	TERMINAL BOARD, GROUND			
TH2	1-537-770-21	TERMINAL BOARD, GROUND			
		< TUNER UNIT >			
TU1	A-4303-953-A	TUNER UNIT (TCB023//K (CE))			(AEP, UK, AUS, CH)
TU1	A-4303-954-A	TUNER UNIT (TCB023//K (UC)) (US, CND, SP)			
		< VIBRATOR >			
X301	1-579-900-21	VIBRATOR, CRYSTAL (4.332MHz) (AEP, UK)			

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POWER (Suffix-11)

Ref. No.	Part No.	Description			Remark
	A-4729-473-A	POWER BOARD, COMPLETE (AEP, UK, AUS)			
	A-4729-474-A	POWER BOARD, COMPLETE (US, CND)			
	A-4729-475-A	POWER BOARD, COMPLETE (SP)			
		**********			
	1-533-313-11	HOLDER, FUSE			
	7-685-546-14	SCREW +BTP 3X8 TYPE2 N-S			
		< CAPACITOR >			
⚠C901	1-113-925-11	CERAMIC	0.01uF	20%	250V
C902	1-101-005-00	CERAMIC	0.022uF		50V
C903	1-101-005-00	CERAMIC	0.022uF		50V
C904	1-101-005-00	CERAMIC	0.022uF		50V
C905	1-101-005-00	CERAMIC	0.022uF		50V
C914	1-161-494-00	CERAMIC	0.022uF		25V
C915	1-161-494-00	CERAMIC	0.022uF		25V
C916	1-161-494-00	CERAMIC	0.022uF		25V
C917	1-161-494-00	CERAMIC	0.022uF		25V
C918	1-126-964-11	ELECT	10uF		50V
C920	1-128-551-11	ELECT	22uF	20%	25V
C921	1-126-767-11	ELECT	1000uF	20%	16V
C925	1-126-944-11	ELECT	3300uF	20%	25V
C929	1-117-298-11	ELECT	330uF	20%	16V
C930	1-117-339-11	ELECT	22uF	20%	35V
C931	1-117-245-11	ELECT	330uF	20%	6.3V
C932	1-117-339-11	ELECT	22uF	20%	35V
C933	1-117-245-11	ELECT	330uF	20%	6.3V
C934	1-117-339-11	ELECT	22uF	20%	35V
C941	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C942	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C943	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C944	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C945	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C946	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C951	1-162-967-11	CERAMIC CHIP	0.0033uF	10%	50V
C952	1-162-967-11	CERAMIC CHIP	0.0033uF	10%	50V
C953	1-162-967-11	CERAMIC CHIP	0.0033uF	10%	50V
		< CONNECTOR >			
CN901	1-564-321-00	PIN, CONNECTOR (3.96mm PITCH) 2P			
CN902	1-766-284-11	PIN, CONNECTOR (PC BOARD) 11P			
CN903	1-568-955-11	PIN, CONNECTOR 6P			
		< DIODE >			
D902	8-719-902-17	DIODE U15G			
D903	8-719-902-17	DIODE U15G			
D904	8-719-902-17	DIODE U15G			
D905	8-719-902-17	DIODE U15G			
D906	8-719-046-07	DIODE 2A02M			
D907	8-719-046-07	DIODE 2A02M			
D908	8-719-046-07	DIODE 2A02M			
D909	8-719-046-07	DIODE 2A02M			
D910	8-719-991-33	DIODE 1SS133T-77			
D911	8-719-991-33	DIODE 1SS133T-77			
D912	8-719-991-33	DIODE 1SS133T-77			
D913	8-719-991-33	DIODE 1SS133T-77			
D914	8-719-046-07	DIODE 2A02M			
D915	8-719-046-07	DIODE 2A02M			
D916	8-719-046-07	DIODE 2A02M			
D917	8-719-046-07	DIODE 2A02M			
D918	8-719-109-93	DIODE RD6.2ES-B2			
D919	8-719-991-33	DIODE 1SS133T-77			
D920	8-719-991-33	DIODE 1SS133T-77			
D921	8-719-991-33	DIODE 1SS133T-77			
D924	8-719-210-21	DIODE 11EQS04			
D925	8-719-210-21	DIODE 11EQS04			
D926	8-719-210-21	DIODE 11EQS04			
		< IC >			
IC901	6-701-021-01	IC SI-8120JF			
IC902	6-700-812-01	IC SI-8050JF			
IC903	6-700-813-01	IC SI-8033JF			
IC904	6-701-760-01	IC uPC3504AHF			
		< COIL >			
L901	1-419-537-11	COIL, CHOKE	330uH		
L902	1-419-537-11	COIL, CHOKE	330uH		
L903	1-416-909-11	COIL, CHOKE	100uH		
		< LINE FILTER >			
⚠LF901	1-424-150-11	TRANSFORMER, LINE FILTER			
		< TRANSISTOR >			
Q902	8-729-901-81	TRANSISTOR	2SC2412K-T-146-R		
Q904	8-729-055-94	TRANSISTOR	SRC1202SF		
		< RESISTOR >			
⚠R900	1-219-237-11	SOLID	3.3M	20%	1/2W (US, CND)
R901	1-249-385-11	CARBON	2.2	5%	1/6W
R903	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R904	1-216-841-11	METAL CHIP	47K	5%	1/10W
R905	1-249-417-11	CARBON	1K	5%	1/4W
R906	1-249-417-11	CARBON	1K	5%	1/4W
R908	1-216-864-11	SHORT CHIP	0		
R909	1-216-864-11	SHORT CHIP	0		
		< RELAY >			
⚠RY901	1-755-332-11	RELAY			
		< SWITCH >			
⚠S901	1-786-152-11	SWITCH, SLIDE (VOLTAGE SELECTOR) (SP)			
		< TRANSFORMER >			
⚠T901	1-437-730-11	TRANSFORMER, POWER (AEP, UK, AUS)			
⚠T901	1-437-731-11	TRANSFORMER, POWER (US, CND)			
⚠T901	1-437-844-11	TRANSFORMER, POWER (SP)			
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The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.	以阴影和 ⚠ 标志来识别的零部件，在安全方面具有关键性，因此只能以规定号码的零部件来更换。

POWER (Suffix-12, -21)

Ref. No.	Part No.	Description			Remark
	A-4729-473-A	POWER BOARD, COMPLETE (AEP, UK, AUS)			
	A-4729-474-A	POWER BOARD, COMPLETE (US, CND)			
	A-4729-475-A	POWER BOARD, COMPLETE (SP)			
	A-4730-566-A	POWER BOARD, COMPLETE (CH)			
		**********			
	1-533-313-11	HOLDER, FUSE			
	7-685-546-14	SCREW +BTP 3X8 TYPE2 N-S			
		< CAPACITOR >			
⚠C901	1-113-925-11	CERAMIC	0.01uF	20%	250V
C902	1-101-005-00	CERAMIC	0.022uF		50V
C903	1-101-005-00	CERAMIC	0.022uF		50V
C904	1-101-005-00	CERAMIC	0.022uF		50V
C905	1-101-005-00	CERAMIC	0.022uF		50V
C914	1-161-494-00	CERAMIC	0.022uF		25V
C915	1-161-494-00	CERAMIC	0.022uF		25V
C916	1-161-494-00	CERAMIC	0.022uF		25V
C917	1-161-494-00	CERAMIC	0.022uF		25V
C918	1-126-964-11	ELECT	10uF		50V
C920	1-128-551-11	ELECT	22uF	20%	25V
C921	1-126-767-11	ELECT	1000uF	20%	16V
C925	1-126-944-11	ELECT	3300uF	20%	25V
C929	1-117-298-11	ELECT	330uF	20%	16V
C930	1-117-339-11	ELECT	22uF	20%	35V
C931	1-117-245-11	ELECT	330uF	20%	6.3V
C932	1-117-339-11	ELECT	22uF	20%	35V
C933	1-117-245-11	ELECT	330uF	20%	6.3V
C934	1-117-339-11	ELECT	22uF	20%	35V
C941	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C942	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C943	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C944	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C945	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C946	1-164-156-11	CERAMIC CHIP	0.1uF		25V
C951	1-162-967-11	CERAMIC CHIP	0.0033uF	10%	50V
C952	1-162-967-11	CERAMIC CHIP	0.0033uF	10%	50V
C953	1-162-967-11	CERAMIC CHIP	0.0033uF	10%	50V
		< CONNECTOR >			
CN901	1-564-321-00	PIN, CONNECTOR (3.96mm PITCH) 2P			
CN902	1-766-284-11	PIN, CONNECTOR (PC BOARD) 11P			
CN903	1-568-955-11	PIN, CONNECTOR 6P			
		< DIODE >			
D902	8-719-902-17	DIODE U15G			
D903	8-719-902-17	DIODE U15G			
D904	8-719-902-17	DIODE U15G			
D905	8-719-902-17	DIODE U15G			
D906	8-719-046-07	DIODE 2A02M			
D907	8-719-046-07	DIODE 2A02M			
D908	8-719-046-07	DIODE 2A02M			
D909	8-719-046-07	DIODE 2A02M			
D910	8-719-200-82	DIODE 11ES2			
D911	8-719-200-82	DIODE 11ES2			
D912	8-719-200-82	DIODE 11ES2			
D913	8-719-200-82	DIODE 11ES2			
D914	8-719-046-07	DIODE 2A02M			
D915	8-719-046-07	DIODE 2A02M			

Ref. No.	Part No.	Description			Remark
D916	8-719-046-07	DIODE 2A02M			
D917	8-719-046-07	DIODE 2A02M			
D918	8-719-109-93	DIODE RD6.2ES-B2			
D919	8-719-200-82	DIODE 11ES2			
D920	8-719-200-82	DIODE 11ES2			
D921	8-719-991-33	DIODE 1SS133T-77			
D924	8-719-210-21	DIODE 11EQS04			
D925	8-719-210-21	DIODE 11EQS04			
D926	8-719-210-21	DIODE 11EQS04			
		< IC >			
IC901	6-701-021-01	IC SI-8120JF			
IC902	6-700-812-01	IC SI-8050JF			
IC903	6-700-813-01	IC SI-8033JF			
IC904	6-701-760-01	IC uPC3504AHF			
		< COIL >			
L901	1-419-537-11	COIL, CHOKE	330uH		
L902	1-419-537-11	COIL, CHOKE	330uH		
L903	1-419-537-11	COIL, CHOKE	330uH		
		< LINE FILTER >			
⚠LF901	1-424-150-11	TRANSFORMER, LINE FILTER			
		< TRANSISTOR >			
Q902	8-729-901-81	TRANSISTOR	2SC2412K-T-146-R		
Q904	8-729-055-94	TRANSISTOR	SRC1202SF		
		< RESISTOR >			
⚠R900	1-219-237-11	SOLID	3.3M	20%	1/2W (US, CND)
R901	1-249-385-11	CARBON	2.2	5%	1/6W
R903	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R904	1-216-841-11	METAL CHIP	47K	5%	1/10W
R905	1-249-417-11	CARBON	1K	5%	1/4W
R906	1-249-417-11	CARBON	1K	5%	1/4W
R908	1-216-864-11	SHORT CHIP	0		
R909	1-216-864-11	SHORT CHIP	0		
R915	1-249-417-11	CARBON	1K	5%	1/4W
R916	1-249-417-11	CARBON	1K	5%	1/4W
		< RELAY >			
⚠RY901	1-755-332-11	RELAY			
		< SWITCH >			
⚠S901	1-786-152-11	SWITCH, SLIDE (VOLTAGE SELECTOR) (SP)			
		< TRANSFORMER >			
⚠T901	1-437-730-11	TRANSFORMER, POWER (AEP, UK, AUS, CH)			
⚠T901	1-437-731-11	TRANSFORMER, POWER (US, CND)			
⚠T901	1-437-844-11	TRANSFORMER, POWER (SP)			
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The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.	以阴影和 ⚠ 标志来识别的零部件，在安全方面具有关键性，因此只能以规定号码的零部件来更换。

RF-240 (Suffix-11)

Ref. No.	Part No.	Description			Remark
	A-4726-850-A	RF-240 BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C001	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C002	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C005	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C006	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C007	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C008	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C009	1-124-779-00	ELECT CHIP	10uF	20%	16V
C015	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C016	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C017	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C018	1-115-416-11	CERAMIC CHIP	0.001uF	5%	25V
C019	1-164-739-11	CERAMIC CHIP	560PF	5%	50V
C021	1-124-779-00	ELECT CHIP	10uF	20%	16V
C022	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C023	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C024	1-115-416-11	CERAMIC CHIP	0.001uF	5%	25V
C025	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C026	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C027	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C028	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C031	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C032	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C033	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C034	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C035	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C036	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C038	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C039	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C040	1-164-217-11	CERAMIC CHIP	150PF	5%	50V
C043	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C044	1-124-779-00	ELECT CHIP	10uF	20%	16V
C046	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C047	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C048	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
		< CONNECTOR >			
CN001	1-766-835-21	CONNECTOR, FFC/FPC (ZIF) 26P			
CN002	1-784-875-21	CONNECTOR, FFC (LIF (NON-ZIF)) 25P			
		< DIODE >			
D001	8-719-988-61	DIODE 1SS355TE-17			
D004	8-719-988-61	DIODE 1SS355TE-17			
		< IC >			
IC001	8-759-828-02	IC SP3728AC			
		< COIL >			
L001	1-412-031-11	INDUCTOR CHIP 47uH			
L002	1-412-031-11	INDUCTOR CHIP 47uH			
		< TRANSISTOR >			
Q001	8-729-903-46	TRANSISTOR 2SB1132-P			
Q002	8-729-903-46	TRANSISTOR 2SB1132-P			

RF-240 (Suffix-22)

Ref. No.	Part No.	Description			Remark
		< RESISTOR >			
R002	1-216-809-11	METAL CHIP	100	5%	1/10W
R003	1-216-809-11	METAL CHIP	100	5%	1/10W
R005	1-216-845-11	METAL CHIP	100K	5%	1/10W
R006	1-216-838-11	METAL CHIP	27K	5%	1/10W
R007	1-216-803-11	METAL CHIP	33	5%	1/10W
R008	1-216-803-11	METAL CHIP	33	5%	1/10W
R009	1-216-821-11	METAL CHIP	1K	5%	1/10W
R010	1-216-841-11	METAL CHIP	47K	5%	1/10W
R011	1-216-809-11	METAL CHIP	100	5%	1/10W
R020	1-216-803-11	METAL CHIP	33	5%	1/10W
R023	1-216-803-11	METAL CHIP	33	5%	1/10W
R025	1-216-841-11	METAL CHIP	47K	5%	1/10W
R029	1-216-809-11	METAL CHIP	100	5%	1/10W
R037	1-216-834-11	METAL CHIP	12K	5%	1/10W
R038	1-216-861-11	METAL CHIP	2.2M	5%	1/10W
R045	1-216-809-11	METAL CHIP	100	5%	1/10W
**********					
	A-4726-850-A	RF-240 BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C001	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C002	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C005	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C006	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C007	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C008	1-162-966-11	CERAMIC CHIP	0.0022uF	10%	50V
C009	1-124-779-00	ELECT CHIP	10uF	20%	16V
C015	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C016	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C017	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C018	1-115-416-11	CERAMIC CHIP	0.001uF	5%	25V
C019	1-164-739-11	CERAMIC CHIP	560PF	5%	50V
C021	1-124-779-00	ELECT CHIP	10uF	20%	16V
C022	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C023	1-126-206-11	ELECT CHIP	100uF	20%	6.3V
C024	1-115-416-11	CERAMIC CHIP	0.001uF	5%	25V
C025	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C026	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C027	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C028	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C031	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C032	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C033	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C034	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C035	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C036	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C038	1-165-176-11	CERAMIC CHIP	0.047uF	10%	16V
C039	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C040	1-164-217-11	CERAMIC CHIP	150PF	5%	50V
C043	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C044	1-124-779-00	ELECT CHIP	10uF	20%	16V
C046	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C047	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C048	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V

RF-240 (Suffix-12) SWITCH (Suffix-11)

Ref. No.	Part No.	Description			Remark
		< CONNECTOR >			
CN001	1-766-835-21	CONNECTOR, FFC/FPC (ZIF) 26P			
CN002	1-784-875-21	CONNECTOR, FFC (LIF (NON-ZIF)) 25P			
		< DIODE >			
D001	8-719-988-61	DIODE 1SS355TE-17			
D004	8-719-988-61	DIODE 1SS355TE-17			
		< IC >			
IC001	6-701-700-01	IC SP3728ACB			
		< COIL >			
L001	1-412-031-11	INDUCTOR CHIP	47uH		
L002	1-412-031-11	INDUCTOR CHIP	47uH		
		< TRANSISTOR >			
Q001	8-729-903-46	TRANSISTOR	2SB1132-P		
Q002	8-729-903-46	TRANSISTOR	2SB1132-P		
		< RESISTOR >			
R002	1-216-809-11	METAL CHIP	100	5%	1/10W
R003	1-216-809-11	METAL CHIP	100	5%	1/10W
R005	1-216-845-11	METAL CHIP	100K	5%	1/10W
R006	1-216-838-11	METAL CHIP	27K	5%	1/10W
R007	1-216-803-11	METAL CHIP	33	5%	1/10W
R008	1-216-803-11	METAL CHIP	33	5%	1/10W
R009	1-216-821-11	METAL CHIP	1K	5%	1/10W
R010	1-216-841-11	METAL CHIP	47K	5%	1/10W
R011	1-216-809-11	METAL CHIP	100	5%	1/10W
R020	1-216-803-11	METAL CHIP	33	5%	1/10W
R023	1-216-803-11	METAL CHIP	33	5%	1/10W
R025	1-216-841-11	METAL CHIP	47K	5%	1/10W
R029	1-216-809-11	METAL CHIP	100	5%	1/10W
R037	1-216-834-11	METAL CHIP	12K	5%	1/10W
R038	1-216-861-11	METAL CHIP	2.2M	5%	1/10W
R045	1-216-809-11	METAL CHIP	100	5%	1/10W
**********					
	A-4729-457-A	SWITCH BOARD, COMPLETE			
		**********			
	4-240-895-01	SHEET (LCD)			
	4-240-898-01	PLATE (LCD) , LIGHT			
	4-240-904-01	HOLDER (LCD)			
		< CAPACITOR >			
C800	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C806	1-126-160-11	ELECT	1uF	20%	50V
C807	1-126-160-11	ELECT	1uF	20%	50V
C820	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C821	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C822	1-124-259-11	ELECT	4.7uF	20%	16V
C833	1-124-584-00	ELECT	100uF	20%	10V
C874	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C875	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V

Ref. No.	Part No.	Description			Remark
		< CONNECTOR >			
CN501	1-568-838-11	CONNECTOR, FFC 21P			
		< LED >			
D804	6-500-083-01	LED NSPW315BSRS (LCD BACK LIGHT)			
D805	6-500-083-01	LED NSPW315BSRS (LCD BACK LIGHT)			
D806	6-500-083-01	LED NSPW315BSRS (LCD BACK LIGHT)			
D809	6-500-076-01	LED SLI-343YC (DVD)			
D810	6-500-076-01	LED SLI-343YC (TUNER)			
D811	6-500-076-01	LED SLI-343YC (DSG)			
D812	6-500-076-01	LED SLI-343YC (TAPE)			
D813	8-719-074-42	LED SLR325VR-T31 (CD SYNCHRO)			
D814	8-719-074-42	LED SLR325VR-T31 (STANDBY)			
		< IC >			
IC802	8-759-826-34	IC NJL74H400A (REMOTE CONTROL RECEIVER)			
		<SHORT >			
JR501	1-216-864-11	SHORT CHIP	0		
JR505	1-216-864-11	SHORT CHIP	0		
JR513	1-216-864-11	SHORT CHIP	0		
JR521	1-216-864-11	SHORT CHIP	0		
JR523	1-216-864-11	SHORT CHIP	0		
		< COIL >			
L501	1-412-006-31	INDUCTOR	10uH		
		< LIQUID CRYSTAL DISPLAY >			
LCD802	1-804-689-11	DISPLAY PANEL, LIQUID CRYSTAL			
		< TRANSISTOR >			
Q805	8-729-055-94	TRANSISTOR	SRC1202SF		
Q806	8-729-055-94	TRANSISTOR	SRC1202SF		
Q807	8-729-055-94	TRANSISTOR	SRC1202SF		
Q808	8-729-055-94	TRANSISTOR	SRC1202SF		
Q809	8-729-055-94	TRANSISTOR	SRC1202SF		
Q811	8-729-055-94	TRANSISTOR	SRC1202SF		
		< RESISTOR >			
R501	1-216-818-11	METAL CHIP	560	5%	1/10W
R502	1-216-818-11	METAL CHIP	560	5%	1/10W
R503	1-216-818-11	METAL CHIP	560	5%	1/10W
R504	1-216-818-11	METAL CHIP	560	5%	1/10W
R505	1-216-818-11	METAL CHIP	560	5%	1/10W
R512	1-216-813-11	METAL CHIP	220	5%	1/10W
R513	1-216-815-11	METAL CHIP	330	5%	1/10W
R514	1-216-817-11	METAL CHIP	470	5%	1/10W
R516	1-216-813-11	METAL CHIP	220	5%	1/10W
R517	1-216-815-11	METAL CHIP	330	5%	1/10W
R518	1-216-817-11	METAL CHIP	470	5%	1/10W
R519	1-216-819-11	METAL CHIP	680	5%	1/10W
R520	1-216-821-11	METAL CHIP	1K	5%	1/10W
R521	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R522	1-216-813-11	METAL CHIP	220	5%	1/10W
R523	1-216-815-11	METAL CHIP	330	5%	1/10W

SWITCH (Suffix-11)

Ref. No.	Part No.	Description			Remark
R524	1-216-817-11	METAL CHIP	470	5%	1/10W
R525	1-216-819-11	METAL CHIP	680	5%	1/10W
R526	1-216-821-11	METAL CHIP	1K	5%	1/10W
R527	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R530	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R531	1-216-817-11	METAL CHIP	470	5%	1/10W
R534	1-216-809-11	METAL CHIP	100	5%	1/10W
R535	1-216-809-11	METAL CHIP	100	5%	1/10W
R536	1-216-809-11	METAL CHIP	100	5%	1/10W
R537	1-216-809-11	METAL CHIP	100	5%	1/10W
R538	1-216-833-11	METAL CHIP	10K	5%	1/10W
R811	1-216-817-11	METAL CHIP	470	5%	1/10W
R812	1-216-817-11	METAL CHIP	470	5%	1/10W
R813	1-216-817-11	METAL CHIP	470	5%	1/10W
R898	1-216-817-11	METAL CHIP	470	5%	1/10W
R899	1-216-817-11	METAL CHIP	470	5%	1/10W
R900	1-216-817-11	METAL CHIP	470	5%	1/10W
		< SWITCH >			
S801	1-786-220-11	SWITCH, KEY BOARD (⏏ DVD)			
S802	1-786-220-11	SWITCH, KEY BOARD (TAPE ◀▶)			
S803	1-571-760-11	SWITCH, KEY BOARD (I/⏻)			
S804	1-786-220-11	SWITCH, KEY BOARD (DVD ❚❚)			
S805	1-786-220-11	SWITCH, KEY BOARD (TUNER FM)			
S806	1-571-760-11	SWITCH, KEY BOARD (FUNCTION)			
S807	1-786-220-11	SWITCH, KEY BOARD (DVD ►)			
S808	1-571-760-11	SWITCH, KEY BOARD (DSG)			
S809	1-571-760-11	SWITCH, KEY BOARD (VOLUME –)			
S811	1-571-760-11	SWITCH, KEY BOARD (VOLUME +)			
S812	1-786-220-11	SWITCH, KEY BOARD (TAPE ❚❚)			
S813	1-571-760-11	SWITCH, KEY BOARD (■)			
S815	1-571-760-11	SWITCH, KEY BOARD (TUNING +, ►► ▷▷I)			
S817	1-786-220-11	SWITCH, KEY BOARD (● REC)			
S818	1-571-760-11	SWITCH, KEY BOARD (TUNING –, I◁◁ ◀◀)			
S820	1-786-220-11	SWITCH, KEY BOARD (TUNER AM)			
**********					
	A-4729-457-A	SWITCH BOARD, COMPLETE (EXCEPT CH)			
	A-4730-561-A	SWITCH BOARD, COMPLETE (CH)			
		**********			
	4-240-895-01	SHEET (LCD)			
	4-240-898-01	PLATE (LCD) , LIGHT			
	4-240-904-01	HOLDER (LCD)			
		< CAPACITOR >			
C800	1-107-826-11	CERAMIC CHIP	0.1uF	10%	16V
C806	1-126-160-11	ELECT	1uF	20%	50V
C807	1-126-160-11	ELECT	1uF	20%	50V
C820	1-162-927-11	CERAMIC CHIP	100PF	5%	50V
C821	1-163-021-11	CERAMIC CHIP	0.01uF	10%	50V
C822	1-124-259-11	ELECT	4.7uF	20%	16V
C833	1-124-584-00	ELECT	100uF	20%	10V
C874	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
C875	1-163-009-11	CERAMIC CHIP	0.001uF	10%	50V
		< CONNECTOR >			
CN501	1-568-838-11	CONNECTOR, FFC 21P			

SWITCH (Suffix-12)

Ref. No.	Part No.	Description			Remark
		< LED >			
D804	6-500-083-01	LED NSPW315BSRS (LCD BACK LIGHT)			
D805	6-500-083-01	LED NSPW315BSRS (LCD BACK LIGHT)			
D806	6-500-083-01	LED NSPW315BSRS (LCD BACK LIGHT)			
D809	6-500-076-01	LED SLI-343YC (DVD)			
D810	6-500-076-01	LED SLI-343YC (TUNER)			
D811	6-500-076-01	LED SLI-343YC (DSG)			
D812	6-500-076-01	LED SLI-343YC (TAPE)			
D813	8-719-074-42	LED SLR325VR-T31 (CD SYNCHRO)			
D814	8-719-074-42	LED SLR325VR-T31 (STANDBY)			
		< IC >			
IC802	8-759-826-34	IC NJL74H400A (REMOTE CONTROL RECEIVER)			
		<SHORT >			
JR501	1-216-864-11	SHORT CHIP	0		
JR505	1-216-864-11	SHORT CHIP	0		
JR513	1-216-864-11	SHORT CHIP	0		
JR521	1-216-864-11	SHORT CHIP	0		
JR523	1-216-864-11	SHORT CHIP	0		
		< COIL >			
L501	1-412-006-31	INDUCTOR	10uH		
		< LIQUID CRYSTAL DISPLAY >			
LCD802	1-804-689-11	DISPLAY PANEL, LIQUID CRYSTAL			
		< TRANSISTOR >			
Q805	8-729-055-94	TRANSISTOR	SRC1202SF		
Q806	8-729-055-94	TRANSISTOR	SRC1202SF		
Q807	8-729-055-94	TRANSISTOR	SRC1202SF		
Q808	8-729-055-94	TRANSISTOR	SRC1202SF		
Q809	8-729-055-94	TRANSISTOR	SRC1202SF		
Q811	8-729-055-94	TRANSISTOR	SRC1202SF		
Q812	8-729-055-94	TRANSISTOR	SRC1202SF		
Q813	8-729-055-94	TRANSISTOR	SRC1202SF		
		< RESISTOR >			
R501	1-216-818-11	METAL CHIP	560	5%	1/10W
R502	1-216-818-11	METAL CHIP	560	5%	1/10W
R503	1-216-818-11	METAL CHIP	560	5%	1/10W
R504	1-216-818-11	METAL CHIP	560	5%	1/10W
R505	1-216-818-11	METAL CHIP	560	5%	1/10W
R512	1-216-813-11	METAL CHIP	220	5%	1/10W
R513	1-216-815-11	METAL CHIP	330	5%	1/10W
R514	1-216-817-11	METAL CHIP	470	5%	1/10W
R516	1-216-813-11	METAL CHIP	220	5%	1/10W
R517	1-216-815-11	METAL CHIP	330	5%	1/10W
R518	1-216-817-11	METAL CHIP	470	5%	1/10W
R519	1-216-819-11	METAL CHIP	680	5%	1/10W
R520	1-216-821-11	METAL CHIP	1K	5%	1/10W
R521	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R522	1-216-813-11	METAL CHIP	220	5%	1/10W
R523	1-216-815-11	METAL CHIP	330	5%	1/10W
R524	1-216-817-11	METAL CHIP	470	5%	1/10W
R525	1-216-819-11	METAL CHIP	680	5%	1/10W

SWITCH (Suffix-12) TC (Suffix-12)

Ref. No.	Part No.	Description			Remark
R526	1-216-821-11	METAL CHIP	1K	5%	1/10W
R527	1-216-823-11	METAL CHIP	1.5K	5%	1/10W
R530	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R531	1-216-821-11	METAL CHIP	1K	5%	1/10W
R534	1-216-809-11	METAL CHIP	100	5%	1/10W
R535	1-216-809-11	METAL CHIP	100	5%	1/10W
R536	1-216-809-11	METAL CHIP	100	5%	1/10W
R537	1-216-809-11	METAL CHIP	100	5%	1/10W
R538	1-216-833-11	METAL CHIP	10K	5%	1/10W
R541	1-216-821-11	METAL CHIP	1K	5%	1/10W
R531	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R811	1-216-817-11	METAL CHIP	470	5%	1/10W
R812	1-216-817-11	METAL CHIP	470	5%	1/10W
R813	1-216-817-11	METAL CHIP	470	5%	1/10W
R898	1-216-817-11	METAL CHIP	470	5%	1/10W
R899	1-216-817-11	METAL CHIP	470	5%	1/10W
R900	1-216-817-11	METAL CHIP	470	5%	1/10W
		< SWITCH >			
S801	1-786-220-11	SWITCH, KEY BOARD (⏏ DVD)			
S802	1-786-220-11	SWITCH, KEY BOARD (TAPE ◀▶)			
S803	1-571-760-11	SWITCH, KEY BOARD (I/⏻)			
S804	1-786-220-11	SWITCH, KEY BOARD (DVD ❚❚)			
S805	1-786-220-11	SWITCH, KEY BOARD (TUNER FM)			
S806	1-571-760-11	SWITCH, KEY BOARD (FUNCTION)			
S807	1-786-220-11	SWITCH, KEY BOARD (DVD ►)			
S808	1-571-760-11	SWITCH, KEY BOARD (DSG)			
S809	1-571-760-11	SWITCH, KEY BOARD (VOLUME –)			
S811	1-571-760-11	SWITCH, KEY BOARD (VOLUME +)			
S812	1-786-220-11	SWITCH, KEY BOARD (TAPE ❚❚)			
S813	1-571-760-11	SWITCH, KEY BOARD (■)			
S815	1-571-760-11	SWITCH, KEY BOARD (TUNING +, ▶▶ ▷▷⏭)			
S817	1-786-220-11	SWITCH, KEY BOARD (● REC)			
S818	1-571-760-11	SWITCH, KEY BOARD (TUNING –, ⏮◁◁ ◀◀)			
S820	1-786-220-11	SWITCH, KEY BOARD (TUNER AM)			

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	A-4729-461-A	TC BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C101	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C102	1-126-947-11	ELECT	47uF	20%	16V
C104	1-130-483-00	MYLAR	0.01uF	5%	50V
C105	1-126-960-11	ELECT	1uF	20%	50V
C106	1-126-964-11	ELECT	10uF	20%	50V
C107	1-126-960-11	ELECT	1uF	20%	50V
C108	1-126-961-11	ELECT	2.2uF	20%	50V
C109	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C110	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C111	1-162-961-11	CERAMIC CHIP	330PF	10%	50V
C201	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C202	1-126-947-11	ELECT	47uF	20%	16V
C204	1-130-483-00	MYLAR	0.01uF	5%	50V
C205	1-126-960-11	ELECT	1uF	20%	50V
C206	1-126-964-11	ELECT	10uF	20%	50V
C207	1-126-960-11	ELECT	1uF	20%	50V
C208	1-126-961-11	ELECT	2.2uF	20%	50V
C209	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C210	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C211	1-162-961-11	CERAMIC CHIP	330PF	10%	50V
C400	1-126-964-11	ELECT	10uF	20%	50V
C401	1-126-933-11	ELECT	100uF	20%	16V
C402	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C403	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C407	1-126-964-11	ELECT	10uF	20%	50V
C410	1-126-960-11	ELECT	1uF	20%	50V
C422	1-162-969-11	CERAMIC CHIP	0.0068uF	10%	25V
C432	1-136-967-11	MYLAR	0.012uF	5%	50V
C433	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C434	1-126-947-11	ELECT	47uF	20%	10V
C435	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C437	1-126-964-11	ELECT	10uF	20%	50V
		< CONNECTOR >			
CN301	1-784-778-11	CONNECTOR, FFC 17P			
CN302	1-691-040-31	CONNECTOR, FFC 8P			
		< SHORT >			
D401	1-216-864-11	SHORT CHIP	0		
		< IC >			
IC401	6-701-655-01	IC HA12236F			
		< RESISTOR >			
JR102	1-216-864-11	SHORT CHIP	0		
JR103	1-216-864-11	SHORT CHIP	0		
JR104	1-216-864-11	SHORT CHIP	0		
JR105	1-216-821-11	METAL CHIP	1K	5%	1/10W
JR106	1-216-821-11	METAL CHIP	1K	5%	1/10W
JR201	1-216-864-11	SHORT CHIP	0		
		< TRANSISTOR >			
Q100	8-729-212-02	TRANSISTOR	2SC2120-Y		
Q101	8-729-212-02	TRANSISTOR	2SC2120-Y		
Q200	8-729-212-02	TRANSISTOR	2SC2120-Y		
Q201	8-729-212-02	TRANSISTOR	2SC2120-Y		
Q401	8-729-212-02	TRANSISTOR	2SC2120-Y		
Q402	8-729-037-02	TRANSISTOR	2SC2120-Y		
Q403	8-729-038-67	TRANSISTOR	KRC102S		
Q404	8-759-068-54	TRANSISTOR	WSC57C291B-RE20A		
Q405	8-729-038-71	TRANSISTOR	KRC107S		
		< RESISTOR >			
R101	1-216-841-11	METAL CHIP	47K	5%	1/10W
R102	1-216-841-11	METAL CHIP	47K	5%	1/10W
R103	1-216-833-11	METAL CHIP	10K	5%	1/10W
R104	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R105	1-216-841-11	METAL CHIP	47K	5%	1/10W
R106	1-216-833-11	METAL CHIP	10K	5%	1/10W
R107	1-216-833-11	METAL CHIP	10K	5%	1/10W
R108	1-216-833-11	METAL CHIP	10K	5%	1/10W
R109	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R111	1-216-833-11	METAL CHIP	10K	5%	1/10W

TC (Suffix-12) **TC (Suffix-32)**

Ref. No.	Part No.	Description			Remark
R112	1-216-830-11	METAL CHIP	5.6K	5%	1/10W
R113	1-216-797-11	METAL CHIP	10	5%	1/10W
R201	1-216-841-11	METAL CHIP	47K	5%	1/10W
R202	1-216-841-11	METAL CHIP	47K	5%	1/10W
R203	1-216-833-11	METAL CHIP	10K	5%	1/10W
R204	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R205	1-216-841-11	METAL CHIP	47K	5%	1/10W
R206	1-216-833-11	METAL CHIP	10K	5%	1/10W
R207	1-216-833-11	METAL CHIP	10K	5%	1/10W
R208	1-216-833-11	METAL CHIP	10K	5%	1/10W
R209	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R211	1-216-833-11	METAL CHIP	10K	5%	1/10W
R212	1-216-830-11	METAL CHIP	5.6K	5%	1/10W
R213	1-216-797-11	METAL CHIP	10	5%	1/10W
R400	1-218-446-11	METAL CHIP	1	5%	1/10W
R401	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R402	1-216-797-11	METAL CHIP	10	5%	1/10W
R403	1-216-805-11	METAL CHIP	47	5%	1/10W
R404	1-216-833-11	METAL CHIP	10K	5%	1/10W
R405	1-216-797-11	METAL CHIP	10	5%	1/10W
R406	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R407	1-216-841-11	METAL CHIP	47K	5%	1/10W
R408	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R409	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R410	1-216-833-11	METAL CHIP	10K	5%	1/10W
R411	1-216-841-11	METAL CHIP	47K	5%	1/10W
R412	1-216-833-11	METAL CHIP	10K	5%	1/10W
R413	1-216-857-11	METAL CHIP	1M	5%	1/10W
R414	1-216-803-11	METAL CHIP	33	5%	1/10W
R415	1-216-841-11	METAL CHIP	47K	5%	1/10W
R416	1-216-821-11	METAL CHIP	1K	5%	1/10W
R417	1-218-725-11	METAL CHIP	24K	5%	1/10W
R418	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R422	1-216-833-11	METAL CHIP	10K	5%	1/10W
R423	1-216-837-11	METAL CHIP	22K	5%	1/10W
R424	1-216-841-11	METAL CHIP	47K	5%	1/10W
R425	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R426	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R428	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
		< VARIABLE RESISTOR >			
RV101	1-225-282-21	RES, ADJ, CARBON 33K			
RV201	1-225-282-21	RES, ADJ, CARBON 33K			
		< COIL/TRANSFORMER >			
T101	1-419-080-11	COIL			
T201	1-419-080-11	COIL			
T401	1-433-372-31	TRANSFORMER, BIAS OSCILLATION			
		< TERMINAL >			
TH1	1-537-770-21	TERMINAL BOARD, GROUND			
TH2	1-537-770-21	TERMINAL BOARD, GROUND			
TH3	1-537-770-21	TERMINAL BOARD, GROUND			

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Ref. No.	Part No.	Description			Remark
	A-4729-461-A	TC BOARD, COMPLETE			
		**********			
		< CAPACITOR >			
C101	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C102	1-126-947-11	ELECT	47uF	20%	16V
C104	1-130-483-00	MYLAR	0.01uF	5%	50V
C105	1-126-960-11	ELECT	1uF	20%	50V
C106	1-126-964-11	ELECT	10uF	20%	50V
C107	1-126-960-11	ELECT	1uF	20%	50V
C108	1-126-961-11	ELECT	2.2uF	20%	50V
C109	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C110	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C111	1-162-961-11	CERAMIC CHIP	330PF	10%	50V
C201	1-164-315-11	CERAMIC CHIP	470PF	5%	50V
C202	1-126-947-11	ELECT	47uF	20%	16V
C204	1-130-483-00	MYLAR	0.01uF	5%	50V
C205	1-126-960-11	ELECT	1uF	20%	50V
C206	1-126-964-11	ELECT	10uF	20%	50V
C207	1-126-960-11	ELECT	1uF	20%	50V
C208	1-126-961-11	ELECT	2.2uF	20%	50V
C209	1-162-964-11	CERAMIC CHIP	0.001uF	10%	50V
C210	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C211	1-162-961-11	CERAMIC CHIP	330PF	10%	50V
C400	1-126-964-11	ELECT	10uF	20%	50V
C401	1-126-933-11	ELECT	100uF	20%	16V
C402	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C403	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C407	1-126-964-11	ELECT	10uF	20%	50V
C410	1-126-960-11	ELECT	1uF	20%	50V
C422	1-162-969-11	CERAMIC CHIP	0.0068uF	10%	25V
C432	1-136-967-11	MYLAR	0.012uF	5%	50V
C433	1-162-968-11	CERAMIC CHIP	0.0047uF	10%	50V
C434	1-126-947-11	ELECT	47uF	20%	10V
C435	1-162-970-11	CERAMIC CHIP	0.01uF	10%	25V
C437	1-126-964-11	ELECT	10uF	20%	50V
		< CONNECTOR >			
CN301	1-784-778-11	CONNECTOR, FFC 17P			
CN302	1-691-040-31	CONNECTOR, FFC 8P			
		< IC >			
IC401	6-702-130-01	IC HA12237F			
		< RESISTOR >			
JR102	1-216-864-11	SHORT CHIP	0		
JR103	1-216-864-11	SHORT CHIP	0		
JR104	1-216-864-11	SHORT CHIP	0		
JR105	1-216-821-11	METAL CHIP	1K	5%	1/10W
JR106	1-216-821-11	METAL CHIP	1K	5%	1/10W
JR201	1-216-864-11	SHORT CHIP	0		
		< TRANSISTOR >			
Q100	8-729-212-02	TRANSISTOR	2SC2120-Y		
Q101	8-729-212-02	TRANSISTOR	2SC2120-Y		
Q200	8-729-212-02	TRANSISTOR	2SC2120-Y		
Q201	8-729-212-02	TRANSISTOR	2SC2120-Y		

TC (Suffix-32) VIDEO

Ref. No.	Part No.	Description			Remark
Q401	8-729-212-02	TRANSISTOR	2SC2120-Y		
Q402	8-729-037-02	TRANSISTOR	2SC2120-Y		
Q403	8-729-038-67	TRANSISTOR	KRC102S		
Q404	8-759-068-54	TRANSISTOR	WSC57C291B-RE20A		
Q405	8-729-038-71	TRANSISTOR	KRC107S		
		< RESISTOR >			
R101	1-216-841-11	METAL CHIP	47K	5%	1/10W
R102	1-216-841-11	METAL CHIP	47K	5%	1/10W
R103	1-216-833-11	METAL CHIP	10K	5%	1/10W
R104	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R105	1-216-841-11	METAL CHIP	47K	5%	1/10W
R106	1-216-833-11	METAL CHIP	10K	5%	1/10W
R107	1-216-833-11	METAL CHIP	10K	5%	1/10W
R108	1-216-833-11	METAL CHIP	10K	5%	1/10W
R109	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R111	1-216-833-11	METAL CHIP	10K	5%	1/10W
R112	1-216-830-11	METAL CHIP	5.6K	5%	1/10W
R113	1-216-797-11	METAL CHIP	10	5%	1/10W
R201	1-216-841-11	METAL CHIP	47K	5%	1/10W
R202	1-216-841-11	METAL CHIP	47K	5%	1/10W
R203	1-216-833-11	METAL CHIP	10K	5%	1/10W
R204	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R205	1-216-841-11	METAL CHIP	47K	5%	1/10W
R206	1-216-833-11	METAL CHIP	10K	5%	1/10W
R207	1-216-833-11	METAL CHIP	10K	5%	1/10W
R208	1-216-833-11	METAL CHIP	10K	5%	1/10W
R209	1-216-825-11	METAL CHIP	2.2K	5%	1/10W
R211	1-216-833-11	METAL CHIP	10K	5%	1/10W
R212	1-216-830-11	METAL CHIP	5.6K	5%	1/10W
R213	1-216-797-11	METAL CHIP	10	5%	1/10W
R400	1-218-446-11	METAL CHIP	1	5%	1/10W
R401	1-216-827-11	METAL CHIP	3.3K	5%	1/10W
R402	1-216-797-11	METAL CHIP	10	5%	1/10W
R403	1-216-805-11	METAL CHIP	47	5%	1/10W
R404	1-216-833-11	METAL CHIP	10K	5%	1/10W
R405	1-216-797-11	METAL CHIP	10	5%	1/10W
R406	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R407	1-216-841-11	METAL CHIP	47K	5%	1/10W
R408	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R409	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R410	1-216-833-11	METAL CHIP	10K	5%	1/10W
R411	1-216-841-11	METAL CHIP	47K	5%	1/10W
R412	1-216-833-11	METAL CHIP	10K	5%	1/10W
R413	1-216-857-11	METAL CHIP	1M	5%	1/10W
R414	1-216-803-11	METAL CHIP	33	5%	1/10W
R415	1-216-841-11	METAL CHIP	47K	5%	1/10W
R416	1-216-821-11	METAL CHIP	1K	5%	1/10W
R417	1-218-725-11	METAL CHIP	24K	5%	1/10W
R418	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R420	1-216-864-11	SHORT CHIP	0		
R422	1-216-833-11	METAL CHIP	10K	5%	1/10W
R423	1-216-837-11	METAL CHIP	22K	5%	1/10W
R424	1-216-841-11	METAL CHIP	47K	5%	1/10W
R425	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R426	1-216-829-11	METAL CHIP	4.7K	5%	1/10W
R428	1-216-829-11	METAL CHIP	4.7K	5%	1/10W

Ref. No.	Part No.	Description	Remark
		< VARIABLE RESISTOR >	
RV101	1-225-282-21	RES, ADJ, CARBON 33K	
RV201	1-225-282-21	RES, ADJ, CARBON 33K	
		< COIL/TRANSFORMER >	
T101	1-419-080-11	COIL	
T201	1-419-080-11	COIL	
T401	1-433-372-31	TRANSFORMER, BIAS OSCILLATION	
		< TERMINAL >	
TH3	1-537-770-21	TERMINAL BOARD, GROUND	
**********			
		VIDEO BOARD	
		**********	
		< IC >	
IC321	8-749-019-13	IC TOTX140 (OPTICAL DIGITAL OUT)	
		< JACK >	
J700	1-794-333-11	JACK, (S) VIDEO CONNECTOR (1GANG)	(S VIDEO OUT)
J701	1-794-331-11	JACK, PIN 1P (VIDEO OUT)	
**********			
		MISCELLANEOUS	
		**********	
58	1-824-373-11	WIRE (FLAT TYPE) (FFC) (21 CORE)	
109	1-773-048-11	WIRE (FLAT TYPE) (17 CORE)	
110	1-824-335-11	WIRE (FLAT TYPE) (EEC) (8 CORE)	
151	1-773-042-11	WIRE (FLAT TYPE) (17 CORE)	
152	1-773-219-11	WIRE (FLAT TYPE) (25 CORE)	
204	1-824-375-11	WIRE (FLAT TYPE) (FFC) (10 CORE)	
206	1-824-590-11	WIRE (FLAT TYPE) (FFC) (5 CORE)	
207	1-824-591-11	WIRE (FLAT TYPE) (FFC) (6 CORE)	
209	1-824-592-11	WIRE (FLAT TYPE) (FFC) (13 CORE)	
212	1-824-378-11	WIRE (FLAT TYPE) (FFC) (25 CORE)	
⚠255	1-696-169-11	CORD, POWER (AEP, UK, SP)	
⚠255	1-696-848-42	CORD, POWER (AUS)	
⚠255	1-782-464-21	CORD, POWER (CH)	
⚠255	1-783-531-72	CORD, POWER (US, CND)	
⚠455	8-820-144-06	DEVICE, OPTICAL KHM-240/J1RP (TYPE A)	
⚠455	A-6062-709-A	SERVICE ASSY, KHM-270AAA (TYPE B)	
457	1-823-072-11	CABLE, FLEXIBLE FLAT 26P	
458	1-823-073-11	CABLE, FLEXIBLE FLAT (9 CORE)	
⚠F901	1-533-467-11	FUSE, GLASS TUBE (DIA. 5) (T1.6AL/250V)	(SP)
⚠F903	1-533-450-11	FUSE, GLASS TUBE (DIA. 5) (2.5A/125V)	(US, CND)
⚠F903	1-533-469-11	FUSE, GLASS TUBE (DIA. 5) (T2.5AL/250V)	(AEP, UK, SP, AUS, CH)
⚠F904	1-533-450-11	FUSE, GLASS TUBE (DIA. 5) (2.5A/125V)	(US, CND)
⚠F904	1-533-469-11	FUSE, GLASS TUBE (DIA. 5) (T2.5AL/250V)	(AEP, UK, SP, AUS, CH)
⚠F906	1-533-450-11	FUSE, GLASS TUBE (DIA. 5) (2.5A/125V)	(US, CND)

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.	以阴影和 ⚠ 标志来识别的零部件，在安全方面具有关键性，因此只能以规定号码的零部件来更换。

Ref. No.	Part No.	Description	Remark
⚠F906	1-533-469-11	FUSE, GLASS TUBE (DIA. 5) (T2.5AL/250V)	(AEP, UK, SP, AUS, CH)
⚠F907	1-533-450-11	FUSE, GLASS TUBE (DIA. 5) (2.5A/125V)	(US, CND)
⚠F907	1-533-469-11	FUSE, GLASS TUBE (DIA. 5) (T2.5AL/250V)	(AEP, UK, SP, AUS, CH)
M901	A-2004-893-A	MOTOR (LD) ASSY (LOADING)	
⚠T902	1-437-853-11	TRANSFORMER, POWER (AEP, UK, AUS, CH)	
⚠T902	1-437-854-11	TRANSFORMER, POWER (US, CND)	
⚠T902	1-437-855-11	TRANSFORMER, POWER (SP)	

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ACCESSORIES

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⚠	1-770-019-11	ADAPTOR CONVERSION PLUG 3P (UK)	

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.	以阴影和 ⚠ 标志来识别的零部件，在安全方面具有关键性．因此只能以规定号码的零部件来更换．

REVISION HISTORY

Clicking the version allows you to jump to the revised page.
Also, clicking the version at the upper right on the revised page allows you to jump to the next revised page.

Ver.	Date	Description of Revision
1.0	2002.05	New
1.1	2002.07	Addition of “Emergency History” to the TEST MODE (SPM-02059)
1.2	2002.10	Correction of “Enter the DVD Service Mode” on TEST MODE (SPM-02084)
1.3	2002.11	Addition of Chinese model Change of RF-240 board (Suffix-22) Change of DVD board (Suffix-22) Change of DAC board (Suffix-12) Change of TC board (Suffix-32) Change of MAIN board (Suffix-16) Change of CONTROL/JACK/SWITCH boards (Suffix-12) Change of POWER board (Suffix-12, -21) Change of OPTICAL PICK-UP Addition of “RELEASING THE DISC TRAY LOCK” to the SERVICING NOTES (ECN-CDB04872/SMB00196/SMB00235/SMB00279/SMB00472/SMB00473/SUA00038/ENG-02017/SPM-02096)
1.4	2004.09	Addition of “NOTE OF REPLACING THE DVD BOARD” to SERVICING NOTES (SPM-04098)

SS-CM90

SERVICE MANUAL

Ver 1.2 2002.11

US Model
Canadian Model
AEP Model
UK Model
E Model
Australian Model
Chinese Model

- SS-CM90 is the speaker system in CMT-M90DVD.
- Silver type is the speaker system in CMT-M80V and CMT-M90DVD.

SPECIFICATIONS

Speaker system	2-way, bass-reflex type
Speaker units	
Woofer:	10 cm dia., cone type
Tweeter:	2.5 cm dia., balanced drive type
Nominal impedance	6 ohms

Design and specifications are subject to change without notice.

PARTS LIST

Part No.	Description	Remark
A-4722-037-A	SPEAKER ASSY (SILVER)	
A-4722-038-A	SPEAKER ASSY (BLUE)	

SPEAKER SYSTEM

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REVISION HISTORY

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Ver.	Date	Description of Revision
1.0	2002.04	New
1.1	2002.08	A note about the silver type is added. (ENG-02014)
1.2	2002.11	Addition of Chinese model (ENG-02017)